

KNOWLEDGE OF TRIBAL WOMEN ABOUT DIFFERENT TYPES OF ANEMIA

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ABSTRACT

Nutritional anemia is a major health problem of women in tribal areas. Tribal women's health is varies because of such factors like local disease prevalence, health related behavior, women education etc. Knowledge plays an important role for achieving desired results. Nutritional knowledge has great importance for improving dietary behavior and good health. Thus, the present study was conducted to know the nutritional knowledge of tribal women regarding different types of anemia. The data was collected through personal interview method and analyzed with appropriate statistical tools such as frequency, percentage, Mean, SD, correlation co-efficient. It is clearly indicated from the results of this study that majority of the tribal women had low to medium level of nutritional knowledge about different types of anemia. The independent variables namely education and source of information were significantly correlated with the knowledge of the tribal women about different types of anemia. On the basis of findings, awareness programmes and training programmes on different types of anemia esp. sickle cell anemia should be organized by health department. Besides, KVKs and other line department should also be arranged programmes for tribal adolescent girls and women to aware about nutritional knowledge among tribal community.

Keywords: nutritional knowledge, anemia, sickle cell anemia, tribal women, nutritional practices

INTRODUCTION

Tribal people are the most conservative, orthodox and superstitious which effect their growth and development in all walks of life particularly for women (Raijihari, 2008). Tribal diets are different from entire population as they include certain common foods and different manner (Mittal,2006). Nutritional anemia is a major health problem of women in tribal areas. The sickle cell anemia is commonly found in tribal community of south Gujarat. Tribal women's health is varies because of such factors like local disease prevalence, health related behavior, women education *etc.* Knowledge plays an important role for achieving desired results. Nutritional knowledge has great importance for improving dietary behavior and good health. Thus, the present study was conducted to know the nutritional knowledge of tribal women regarding different types of anemia.

OBJECTIVES

- (1) To study the profile of respondents
- (2) To study the nutritional knowledge of tribal women regarding different types of Anemia

- (3) To examine the relationship between dependent & independent variables
- (4) To study the level of knowledge of tribal women regarding different types of Anemia

METHODOLOGY

The study was conducted in purposively selected Vyara block of Tapi district. From Vyara block, five villages were selected purposively. From each village, 20 tribal women were selected randomly making total size of 100. The data was collected through personal interview method and set of 15 questions of nutritional knowledge regarding different types of Anemia were used. One score was given for each correct answer and zero was given for wrong answer or if no answer was given by tribal women. The data was analyzed with appropriate statistical tools such as frequency, percentage, Mean, SD, correlation co-efficient.

RESULTS AND DISCUSSION

Profile of respondents

The profile of respondents is given in Table 1.

Table 1: Distribution of tribal women according to their characteristics

| Sr. No. | Characteristics | No. | Per cent |
|----------|---|-----|----------|
| 1 | Age | | |
| a | Young age (below 35 yrs) | 30 | 30.00 |
| b | Middle age (35 to 50 yrs) | 66 | 66.00 |
| c | Old age (above 50 yrs) | 04 | 04.00 |
| 2 | Education | | |
| a | Illiterate | 20 | 20.00 |
| b | Primary | 31 | 31.00 |
| c | Secondary | 23 | 23.00 |
| d | Higher Secondary | 18 | 18.00 |
| e | Diploma | 00 | 00.00 |
| f | Graduate | 07 | 07.00 |
| G | Post graduate | 01 | 01.00 |
| 3 | Family Education | | |
| a | Illiterate | 76 | 19.24 |
| b | Primary | 144 | 36.45 |
| c | Secondary | 70 | 17.72 |
| d | Higher Secondary | 62 | 15.69 |
| e | Diploma | 08 | 02.02 |
| f | Graduate | 30 | 07.59 |
| g | Post graduate | 05 | 01.26 |
| 4 | Family type | | |
| a | Joint | 74 | 74.00 |
| b | Nuclear | 26 | 26.00 |
| 5 | Family size | | |
| a | 1 to 2 members | 04 | 04.00 |
| b | 3 to 4 members | 28 | 28.00 |
| c | 5 to 6 members | 56 | 56.00 |
| d | 7 to 8 members | 04 | 04.00 |
| e | Above 8 members | 08 | 08.00 |
| 6 | Occupation | | |
| a | Agriculture | 38 | 38.00 |
| b | Agriculture with Animal husbandry | 50 | 50.00 |
| c | Agriculture with service | 07 | 07.00 |
| d | Agriculture with other enterprise | 02 | 02.00 |
| e | Agriculture with service and other enterprise | 03 | 03.00 |
| 7 | Annual income | | |
| a | Below ₹ 50,000 | 82 | 82.00 |
| b | ₹ 50,001 to ₹ 1,00,000 | 10 | 10.00 |
| c | ₹ 1,00,001 to ₹ 1,50,000 | 05 | 05.00 |
| d | ₹ 1,50,001 to ₹ 2,00,000 | 00 | 00.00 |
| e | Above ₹ 2,00,000 | 03 | 03.00 |

The data in Table 1.1 revealed that majority of tribal women (66.00 per cent) belonged to middle age group followed by 30.00 and 04.00 per cent belonged to young age and old age group respectively.

It is evident from Table 1.2 that 20.00 per cent of the tribal women were illiterate and 31.00 per cent of the tribal women had education up to primary school, followed by secondary school (23.00 per cent), higher secondary school (18.00 per cent), graduate (7.00 per cent) and post graduate (1.00 per cent).

The data of Table 1.3 indicated that 19.24 per cent of the family members were illiterate and 36.45 per cent of the family members had education up to primary school followed by 17.72, 15.69, 7.59 per cent of them had education up to secondary school, higher secondary school and graduate respectively while 2.02 and 1.26 per cent of family members had education up to diploma and post graduate respectively.

The data portrayed in Table 1.4 indicated that majority (74.00 per cent) of the respondents had joint family followed by 26.00 per cent had nuclear family.

The information presented in Table 1.5 revealed that more than half (57.00 per cent) of the respondents having a family of 5 to 6 members followed by 28.00 and 8.00 per cent had 3 to 4 members and above 8 members respectively while equal i.e. 4.00 per cent of them had 1 to 2 members and 7 to 8 members in their families.

The data presented in Table 1.6 revealed that half (50.00 per cent) of the respondents had agriculture with animal husbandry followed by agriculture (38.00 per cent) as their main occupation while 7.00, 3.00 and 2.00 per cent of them engaged in agriculture with service, agriculture with service & other enterprise and agriculture with other enterprise respectively.

The data portrayed in Table 1.7 indicated that majority (82.00 per cent) of the respondents had annual income upto ₹ 50,000 while 10.00, 5.00 and 3.00 per cent of them had ₹ 50,001 to 1,00,000, ₹ 1,00,001 to 1,50,000 and above ₹ 2,00,000 annual income respectively.

Table 2: Information regarding sickle cell anemia from respondents (n=100)

| Sr. No. | Details | No. |
|---------|--|-----|
| 1 | Families having Sickle cell Anemia | 12 |
| 2 | Family members having Sickle cell Anemia | 26 |
| 3 | Family members having Sickle cell trait (50%) | 21 |
| 4 | Family members having Sickle cell disease (100%) | 05 |

The data of Table 2 indicated that 12.00 per cent of respondents had total 26 no. of sickle cell anemic family members. From total 26 family members 21 and 5 no. of members were suffering from sickle cell trait (50%) and sickle cell disease (100%) respectively.

Table 3: Distribution of tribal women according to Social participation

(n=100)

| Sr. No. | Categories* | No. | Per cent |
|---------|-------------------------------|-----|----------|
| 1 | Gram Panchayat | 05 | 05.00 |
| 2 | Milk co-operative society | 55 | 55.00 |
| 3 | SEWA co-operative society | 01 | 01.00 |
| 4 | Farmers club | 08 | 08.00 |
| 5 | Mahila Mandal | 32 | 32.00 |
| 6 | Bhajan Mandal | 01 | 01.00 |
| 7 | Sakhi Mandal/ Self Help Group | 61 | 61.00 |
| 8 | Samaj Sangathan | 01 | 01.00 |
| 9 | Non-Govt. organization | 08 | 08.00 |
| 10 | No participation | 06 | 06.00 |

*Multiple responses

The data presented in Table 3 revealed that 61.00 and 55.00 per cent of the respondents had participated in *Sakhi Mandal/ Self Help Group* and *Milk co-operative society* respectively. The data also indicated that 32.00 per cent of the respondents had participated in *Mahila Mandal* and very less participation i.e. 8.00 and 5.00 per cent in *Farmers club & NGOs* and *Gram Panchayat* respectively whereas 6.00 per cent of them had no any type of social participation.

Table 4: Source of information about different types of anemia (n=100)

| Sr. No. | Source of information* | No. | Per cent |
|---------|--|-----|----------|
| 1 | Health Department | 17 | 17.00 |
| 2 | Primary Health Centre/ Community Health Centre | 20 | 20.00 |
| 3 | ASHA workers | 17 | 17.00 |
| 4 | Aanganwadi workers | 07 | 07.00 |
| 5 | Krishi Vigyan Kendra | 21 | 21.00 |
| 6 | Health camp | 05 | 05.00 |
| 7 | Co-operative Society | 04 | 04.00 |
| 8 | Folder/ Leaflet/ Poster/ Magazine/Book | 07 | 07.00 |
| 9 | Newspaper | 12 | 12.00 |
| 10 | Radio | 01 | 01.00 |

| Sr. No. | Source of information* | No. | Per cent |
|---------|------------------------|-----|----------|
| 11 | Television | 14 | 14.00 |
| 12 | Progressive women | 11 | 11.00 |
| 13 | Friends/ Neighbors | 15 | 15.00 |
| 14 | No information | 46 | 46.00 |

*Multiple responses

The data portrayed in Table 4 indicated that majority (46.00 per cent) of the respondents had no any type of information regarding anemia while 21.00, 20.00 and 17.00 per cent of the respondents had gained information about

anemia from KVK, PHC/CHC and ASHA workers/ Health department respectively. The data also indicated that 15.00, 14.00, 12.00, 11.00 per cent of the respondents had gained information from friends/neighbors, Television, Newspaper, progressive women respectively and 7.00 per cent of tribal women had gained information about anemia from Aanganwadi workers and Folder/ Leaflet/ Poster/ Magazine/ Book respectively.

Knowledge of tribal women about different types of anemia

The results of the study were presented in following table.

Table 5: Knowledge of tribal women about different types of anemia

(n=100)

| Sr. No. | Nutritional Practices | No. | Per cent |
|---------|---|-----|----------|
| 1 | A deficiency of iron produces the Anemia disease in human beings. | 75 | 75.00* |
| 2 | Symptoms of Anemia | 73 | 73.00* |
| 3 | Sickle cell Anemia is a recessive genetic disease. | 71 | 71.00* |
| 4 | Shepu leaves, rice flakes, dates, watermelon are rich sources of iron. | 66 | 66.00* |
| 5 | Age of normal RBC is about 120 days in human body. | 59 | 59.00* |
| 6 | Anemia (Megaloblastic) is caused by deficiencies of vitamin B ₁₂ and folic acid in body. | 51 | 51.00# |
| 7 | Iron deficiency anemia resulting from chronic intestinal blood loss due to hookworm infection. | 51 | 51.00# |
| 8 | Vitamin-C helps for absorption of dietary iron in body. | 42 | 42.00# |
| 9 | Iron, Protein & vitamin-C rich diet should be consumed for preventing Anemia. | 41 | 41.00# |
| 10 | Types of Sickle cell Anemia | 34 | 34.00@ |
| 11 | Hemoglobin is made up of iron and protein. | 31 | 31.00@ |
| 12 | Vitamin-B ₁₂ and Folic acid is responsible for formation of Red Blood Cell. | 27 | 27.00@ |
| 13 | Diagnosis of fetus regarding Sickle cell Anemia during pregnancy. | 27 | 27.00@ |
| 14 | The normal range of Hb for women is 12-14 gm% | 24 | 24.00@ |
| 15 | Causes of Sickle cell Anemia | 12 | 12.00@ |

Mean:45.6 SD:6.36 * = Maximum knowledge # = Moderate knowledge @ = Least knowledge

The data presented in Table 5 revealed that the tribal women had maximum knowledge about five selected nutritional practices that is 75.00, 73.00 and 71.00 per cent of the respondents knew that ‘A deficiency of iron produces the Anemia disease in human beings, symptoms of Anemia and Sickle cell Anemia is a recessive genetic disease’ respectively. Knowledge about iron rich foodstuff and age of normal RBC were high. About four of the selected nutritional practices were moderately known to the tribal women. This included ‘Vitamin B₁₂ and folic acid deficiency disease, iron deficiency anemia is caused by hookworm infection, Vitamin-C helps for iron absorption and iron, protein & vitamin-c rich diet should be consumed for preventing anemia.’ The data indicated that the tribal women had low knowledge about six selected nutritional practices. This included ‘Causes of sickle cell anemia, normal range of Hb for women, diagnosis and types of sickle cell anemia, formation of RBC and Hb.’

Table 6: Relationship between independent variables and dependent variables of tribal women (n=100)

| Sr. No. | Independent variables | Correlation co-efficient (r) |
|----------------|-----------------------|------------------------------|
| | | Knowledge |
| X ₁ | Age | 0.0294 |
| X ₂ | Education | 0.2987* |
| X ₃ | Family type | 0.0027 |
| X ₄ | Family size | -0.0800 |
| X ₅ | Occupation | 0.0981 |
| X ₆ | Annual income | 0.1172 |
| X ₇ | Social participation | -0.0135 |
| X ₈ | Source of information | 0.3194* |

* Significant at 5 per cent level of probability

The data portrayed in Table 6 indicated that education and source of information were significantly associated with

the knowledge of the tribal women about different types of anemia.

Table 7: Distribution of tribal women according to level of knowledge (n=100)

| Level of knowledge | No. | Per cent |
|--------------------|-----|----------|
| Low (<6) | 29 | 29.00 |
| Medium (6 to 8) | 45 | 45.00 |
| High (>8) | 26 | 26.00 |
| Mean:6.82 | | SD:0.707 |

The information presented in Table 7 revealed that 74.00 per cent of the tribal women had low to medium level of nutritional knowledge about different types of anemia. However, 26.00 per cent of the tribal women had high level of knowledge.

CONCLUSION

It is clearly indicated from the results of this study that majority of the tribal women had middle aged, educated upto primary and secondary, in joint family, 5 to 6 members in their family, engaged in agriculture with animal husbandry, annual income upto Rs.50,000 and participated in *Sakhi Mandal/* Self Help Group and Milk co-operative society. Majority of the tribal women had low to medium level of nutritional knowledge about different types of anemia. The independent variables namely education and source of information were significantly correlated with the knowledge of the tribal women about different types of anemia. On the basis of findings, awareness programmes and training programmes on different types of anemia esp. sickle cell anemia should be organized by health department. Besides,

KVKs and other line department should also be arranged programmes for tribal adolescent girls and women to aware about nutritional knowledge among tribal community.

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