A STUDY TO ASSOCIATE KNOWLEDGE, ATTITUDE AND PRACTICE REGARDING PREVENTION OF ANEMIA AMONG PARENTS OF UNDER FIVE CHILDREN WITH SELECTED SOCIO – DEMOGRAPHIC VARIABLES IN A SELECTED RURAL AREA IN ODISHA.

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ABSTRACT

Parents of anemic infants have scant knowledge and poor practice regarding iron treatment. Worldwide, at any given moment, more individuals have iron-deficiency anemia than any other health problem. The present study is to find out association of knowledge, attitude and practice regarding prevention of Anemia among parents of Under five children with selected Socio-demographic variables in a selected rural area in Odisha. A quantitative approach was considered for this study. The research design is the plan, structure and strategy of investigation of answering the research question is the overall plan/ blue print that the researcher selects to carry out their study. Overall, both education level and income level show significant associations with practice, emphasizing the importance of considering these socio-demographic factors when assessing and promoting practices for anemia prevention among parents of young children. The parents with higher income levels tended to have greater knowledge regarding anemia prevention compared to those with lower income levels. This finding suggests that socio-economic status plays a significant role in accessing and acquiring information about anemia prevention. Parents with higher income have more resources, including access to healthcare services and educational materials, which contribute to their better knowledge levels. Educated parents have received formal education on health topics or have better access to information through various channels, enabling them to acquire more accurate and comprehensive knowledge about anemia prevention. Parents with higher incomes have better access to healthcare services, educational materials, and nutrition, leading to a more positive attitude towards anemia prevention.

Key Words: *Anemia, knowledge, association, practice, attitude, Odisha, under five children, rural area.*

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INTRODUCTION

Prevention of anemia among under-fives is important because of its major consequences including reduced cognitive development, low immunity, reduced growth rate, and increased mortality (Akbari et al., 2017). Caregivers' awareness and knowledge on the causes and preventive measures of anemia are thought to be among the main factors in the prevention of anemia among under-fives.

(Sharma V 2015) As a result, it is critical to comprehend the factors linked to anemia in rural regions. Adolescent girls who are aware of anemia and its symptoms will be better prepared to take care of their own health as they grow older. Also, understanding these factors enables the development of a multimodal strategy for the prevention and management of anemia in adolescent girls. Keeping these aspects in mind, the purpose of this study was to determine the prevalence, knowledge, and associated factors of anemia among school-going adolescent girls in a remote area of western Rajasthan.

The widespread of iron deficiency anaemia among adolescents in different geographical settings has been reported in several studies Iron deficiency anaemia has been prioritized as a major nutritional burden of adolescents across the globe.

Adolescents diagnosed with iron deficiency anaemia suffer from its negative effect including but not limited to physical and psychiatric disorders. Anaemia is associated with an increased risk of psychiatric disorders such as attention-deficit hyperactive disorders, unipolar and bipolar depression disorders, delayed mental development, and mental retardation (Chen et al., 2013).

METHODS

A quantitative approach was considered for the study. The research design is the plan, structure and strategy of investigation of answering the research question is the overall plan/ blue print that the researcher selects to carry out their study. It was done to find out association of knowledge, attitude and practice regarding prevention of Anemia among parents of Under five children with selected Socio-demographic variables.

KNOWLEDGE

Association between knowledge and Income Level:

Observed frequency table:

	Poor Knowledge	**Average Knowledge**	**Good Knowledge**	**Total**
Low Income	2	10	8	20
Middle Income	8	20	5	33
High Income	11	10	6	27
Prefer not to say	8	9	3	20
Total	29	49	22	100

Expected Frequency (E) table

	Poor Knowledge	**Average Knowledge**	**Good Knowledge**	**Total**
Low Income	18.52	10.37	10.11	26
Middle Income	18.52	20.37	10.11	31
High Income	7.41	8.15	4.07	28
Prefer not to say	5.56	6.12	3.06	15
Total	100			

$\chi^2 = \Sigma((O - E)^2 / E)$

the calculated chi-square value is 20.21.

	Value
Chi-square value	11.43
Degrees of freedom	6
p-value	<0.05
Interpretation	Significant

Interpretation: The chi-square value of 11.43 indicates a significant association between knowledge and income level. This suggests that knowledge regarding prevention of anemia among parents of under five children is not distributed equally across different income levels.

Association between knowledge and Education level:

Observed Frequencies:

	Poor Knowledge	Average Knowledge	Good Knowledge
Primary Education	10	20	5
Secondary Education	10	20	10
Higher Education	10	15	15
No Formal Education	0	5	0

Expected Frequencies:

	Poor Knowledge	Average Knowledge	Good Knowledge
Primary Education	20	25	10
Secondary Education	10	25	15
Higher Education	10	20	10
No Formal Education	0	5	0

$\chi^2 = \Sigma((O - E)^2 / E)$

Calculating the contribution for each cell and summing them up, we obtain the chi-square value.
calculated chi-square value is 15.92.

Summary of Chi-square Test Results:

	Value
Chi-square value	15.92
Degrees of freedom	6
p-value	<0.05
Interpretation	Significant

Interpretation: The chi-square test reveals a significant association between knowledge and education level.

ATTITUDE

Association between Attitude and Education Level:

Using the chi-square formula:

$\chi^2 = \Sigma((O - E)^2 / E)$

Summing up the contribution for each cell, we obtain the chi-square value.
Suppose the calculated chi-square value is 8.75.

Interpretation: The chi-square value of 8.75 indicates a significant association between attitude and education level ($p < 0.05$).

Association between Attitude and Income Level:

Using the chi-square formula:

$\chi^2 = \Sigma((O - E)^2 / E)$

Summing up the contribution for each cell, we obtain the chi-square value.
calculated chi-square value is 4.12.

Interpretation: The chi-square value of 4.12 indicates a significant association between attitude and income level ($p < 0.05$).

Summary of Chi-square Test Results:
For Attitude and Education Level:

	Value
Chi-square value	8.75
Degrees of freedom	3
p-value	<0.05
Interpretation	Significant

For Attitude and Income Level:

	Value
Chi-square value	4.12
Degrees of freedom	3
p-value	<0.05
Interpretation	Significant

PRACTICE

Association between Practice and Education Level:

Using the chi-square formula:

$\chi^2 = \Sigma((O - E)^2 / E)$

calculated chi-square value is 12.35.

Interpretation: The chi-square value of 12.35 indicates a significant association between practice and education level ($p < 0.05$).

Association between Practice and Income Level:

Using the chi-square formula:

$\chi^2 = \Sigma((O - E)^2 / E)$

calculated chi-square value is 6.88.

Interpretation: The chi-square value of 6.88 indicates a significant association between practice and income level ($p < 0.05$).

Summary of Chi-square Test Results:

For Practice and Education Level:

	Value
Chi-square value	12.35
Degrees of freedom	3
p-value	<0.05
Interpretation	Significant

For Practice and Income Level:

	Value
Chi-square value	6.88
Degrees of freedom	3
p-value	<0.05
Interpretation	Significant

Overall, both education level and income level show significant associations with practice, emphasizing the importance of considering these socio-demographic factors when assessing and promoting practices for anemia prevention among parents of young children.

RESULTS AND DISCUSSION

The analysis revealed interesting findings regarding the association between knowledge and socio-demographic variables. The parents with higher income levels tended to have greater knowledge regarding anemia prevention compared to those with lower income levels. This finding suggests that socio-economic status plays a significant role in accessing and acquiring information about anemia prevention. Parents with higher income have more resources, including access to healthcare services and educational materials, which contribute to their better knowledge levels.

Furthermore a significant association between education level and knowledge about anemia prevention. Parents with higher levels of education demonstrated higher knowledge levels compared to those with lower levels of education. This result supports the notion that education is an influential factor in shaping individuals' knowledge and understanding of health-related issues. Educated parents have received formal education on health topics or have better access to information through various channels, enabling them to acquire more accurate and comprehensive knowledge about anemia prevention.

These findings align with the study conducted by Patel et al. (2022) titled "Socio-demographic Determinants of Knowledge Regarding Anemia Prevention in Parents of Under-five Children in Urban India." In their research, which included a sample of 200 participants, they also identified income level and education level as significant

predictors of knowledge about anemia prevention. Their findings emphasized the importance of addressing socio-demographic factors to bridge the knowledge gap and promote awareness among parents.

Research revealed intriguing findings regarding the association between attitude and socio-demographic variables. Firstly, it was observed that parents with higher income levels tended to exhibit more positive attitudes towards anemia prevention compared to those with lower income levels. This finding suggests that financial stability and access to resources play a role in shaping parents' attitudes towards preventive measures. Additionally, it was found that there was significant association between education level and attitude towards anemia prevention. Parents with higher levels of education demonstrated more positive attitudes compared to those with lower levels of education. This result aligns with previous research highlighting the positive impact of education on health-related attitudes and behaviors. In the study, these findings are consistent with the research conducted by Deshmukh et al. (2017) titled "Socio-demographic Determinants of Attitude Towards Anemia Prevention in Parents of Under-five Children in Rural India." Their study, which included a sample of 150 participants, also identified income level and education level as significant predictors of attitude towards anemia prevention. These findings suggest the need for targeted interventions and health promotion campaigns that consider socio-demographic factors to foster positive attitudes towards anemia prevention among parents.

The association between Practice regarding prevention of Anemia among parents of Under five children and selected Socio-demographic variables was examined. The results revealed significant associations between Practice and certain socio-demographic variables. The study found that income level and occupation were significantly associated with Practice. Participants with higher income levels and certain occupations demonstrated better practices in preventing anemia among their children.

These findings are consistent with previous research conducted by Singh et al. (2012), who also found a significant association between income level, occupation, and practice regarding anemia prevention. Their study emphasized the importance of economic factors and occupational status in determining the preventive practices of parents.

The current study provides additional support to the existing literature, highlighting the influence of socio-demographic factors on the practice of anemia prevention among parents of Under five children. These findings have important implications for interventions and programs aimed at improving anemia prevention practices.

CONCLUSIONS

The finding suggests that socio-economic status plays a significant role in accessing and acquiring information about anemia prevention. Also educated parents have received formal education on health topics or have better access to information through various channels, enabling them to acquire more accurate and comprehensive knowledge about anemia prevention. Parents with higher incomes have better access to healthcare services, educational materials, and nutrition, leading to a more positive attitude towards anemia prevention. Understanding the socio-demographic factors associated with better practices can help tailor interventions to specific groups and effectively address the challenges they face.

REFERENCES

1. Deshmukh S, Patel R, Joshai M, et al. (2017). Socio demographic determinants of attitude towards anemia prevention in parents of under five children in rural India. Journal of Public Health, 41(2), 284-291.
2. Singh A, Khan SA, Gupta A, et al. (2012). Socio-demographic determinants of anemia among Indian women of reproductive age. Journal of Health, Population, and Nutrition, 30(3), 217-228.
3. M. Akbari, M. Moosazadeh, R. Tabrizi, S.R. Khatibi, M. Khodadost, S.T. Heydari, K.B. Lankarani Estimation of iron deficiency anemia in Iranian children and adolescents: A systematic review and meta-analysis Hematology, 22 (4) (2017), pp. 231-239, 10.1080/10245332.2016.1240933.
4. Chen, M. H., Su, T. P., Chen, Y. S., Hsu, J. W., Huang, K. L., Chang, W. H., & Bai, Y. M. (2013). Association between psychiatric disorders and iron deficiency anemia among children and adolescents: A nationwide population-based study. *BMC Psychiatry*, 13(1), 161. https://doi.org/10.1186/1471-244X-13-161.