



REVIEW ARTICLE

A STUDY TO ASSESS THE PREVALENCE AND ITS RELATION WITH THE SELECTED SOCIO-DEMOGRAPHIC FACTORS AMONG THE CHILDREN'S UNDER THE AGE 5 YEARS

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ABSTRACT

In underdeveloped nations, diarrhoea is a prevalent ailment that significantly influences the morbidity and mortality of children. It ranks as the third most common cause of death for children under five in India. **Objective:** The Purpose of the study is to assess the prevalence and its relation with the selected socio-demographic variables among the children's under the age 5. **Methods:** Hospital based crosssectional study design. **Results:** Majority of the mothers of children's under the age 5 year 63(52.5%) were in the age group 25-31 years and Majority 62(51.7%) of mothers had 2 children's. The Prevalence of diarrhea among the children's under the age 5 years was 28.3% and it was found to be significantly associated with Age of mothers, Religion, Gender of the baby, Education of Mother, Occupation of father and SES. **Conclusion:** Prevalence of diarrhea among under five year old children's is very high especially in rural area and it is an alarming situation. It was suggested that local health programs should be conducted to educate families in rural area to reduce prevalence rate.

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INTRODUCTION

The World Health Organization (WHO) defines diarrhoea as the occurrence of three or more loose or liquid stools per day. It is also defined as having a higher frequency of stools than usual for the individual. Loss of fluid, electrolyte imbalance, and nutritional deficiency may results in the occurrence of diarrhoea which may lead to dehydration and death. Diarrhoea can be classified into three categories:

Acute diarrhoea: It is the most prevalent kind of diarrhoea, causing children to quickly become dehydrated due to severe fluid loss from acute diarrhoea. Acute diarrhoea can linger anywhere from a few hours to several days.

Chronic Diarrhoea: Chronic diarrhoea is defined as lasting longer than four weeks or returning often over time. When diarrhoea lasts this long, parents should take their kids to the doctor because it could indicate a more serious condition. As per the most recent world health organization report, diarrheal illness accounts for almost 8.0% of deaths in children's under five years of the age. This suggests concerning global situation. In India, paediatric diarrheal illness has emerged as major public health concern.

Diarrheal-related deaths among children's under five in in India remain concerning despite various interventions and control schemes.

Background: Children under five years of age are one of the most vulnerable populations, particularly in terms of health and development. During this critical period, they are highly susceptible to various diseases, malnutrition, and developmental challenges, which can have long-lasting impacts on their physical, cognitive, and emotional well-being. Understanding the prevalence of health-related conditions in this age group is crucial for early intervention, better health outcomes, and policy-making. Recent global and national health reports highlight the significant burden of childhood illnesses, including malnutrition, infectious diseases, and developmental disorders, especially in low- and middle-income countries. Factors such as inadequate access to healthcare, poor socioeconomic conditions, and limited parental education are often associated with higher rates of illness in this population. These issues are particularly acute in rural or marginalized communities where healthcare infrastructure is weak, and there is limited awareness of early childhood health. This study aims to assess the prevalence of [specific condition] among children under five years of age and explore its relationship with selected socio-demographic factors, including age, gender, family income, and maternal education. By identifying these correlations, the study seeks to

provide insights that can inform healthcare policies and targeted interventions to enhance the well-being of young children.

MATERIALS AND METHODS

Study settings: A study was conducted at Al-Ameen Hospital, Vijayapur.

Sample size: A sample size of 120

Sampling method: A purposive sampling method was used to collect the data.

Study population: Children's under the age of 5 years with diarrhoea visiting Al-Ameen hospital, Vijayapur.

Inclusion criteria: Children's under the age of 5 years suffering from diarrhoea.

Exclusive criteria

- Children's above five years of age
- Children's parents who are present at the data collection
- Children's parents who are willing to participate

Methods

Hospital based cross sectional study was conducted among the mothers of children's age of 5 years from June to Aug- 2024. A total of mothers were selected using single proportion formula. A data regarding socio-demographic factors and diarrheal history was collected from the Mothers of the children's. The data was entered and analysed using SPSS version 21. Descriptive and inferential statistic was used to analyse the data.

RESULTS

Table 1. Frequency and percentage distribution of socio-demographic factor

Age	Frequency	Percentage
18-24	12	10.0
25-31	63	52.5
32-38	30	25.0
39-45	15	12.5
Religion		
Hindu	62	51.7
Muslims	46	38.3
Others	12	10.0
No of children's		
1.00	52	43.3
2.00	62	51.7
3.00	6	5.0
Gender of baby		
Male	50	41.7
Female	70	58.3
Education of Mother		
Illiterate	20	16.7
Primary	16	13.3
Higher Primary	18	15.0
PUC	32	26.7
Graduates	34	28.3
Occupation of Mother		
Housewife	80	66.7
Labour	10	8.3
Private Employee	24	20.0

Government Employee	6	5.0
Education of Father		
Primary	10	8.3
PUC	6	5.0
Degree	104	86.7
Occupation Mother		
Government Employee	14	11.7
Private Employee	90	75.0
Contract Basis	16	13.3
Place		
Rural	80	66.7
Urban	40	33.3
SES		
Upper Middle	65	54.2
Lower Middle	53	44.2
Upper Lower	2	1.7

Table no 1 revealed that, majority of the Mothers 63(52.5%) of children's under the age five years were in the age group 25-31 years, majority 62 (51.7%) of the mothers were Hindu, majority 62(51.7%) mothers had 2 children's, majority 50(41.7%) of the baby were males, majority 34(28.3%) of the mothers were graduates, majority of mothers 80(66.7%) were housewife, Majority of the fathers 104(86.7%) were graduates, and majority of fathers 90(75.0%) of the fathers were private employee. Out of 120 parents, majority 80(66.7%) of them were from rural area while 40(33.7%) were from urban area and majority 65(54.2%) were belongs to upper middle class followed by 53(44.2%) belongs to lower middle class.

Table 2. The prevalence of diarrhoea among the children's under the age of 5 years

SINO	Diarrhoea	Prevalence	
		Frequency	Percentage
1	Yes	34	28.3
2	No	86	71.7
	Total	120	100.0

Table 3. Association between prevalence and socio-demographic factors of study participants

SINO	Socio-demographic factors	df	Chi-square	P-value
1	Age of mothers	3	14.38	0.002(HS)
2	Religion	2	9.01	0.01(HS)
3	Gender of baby	1	37.2	<0.0001(HS)
4	No of children's	2	6.58	0.037(S)
5	Education of Mother	4	13.84	0.008(HS)
6	Occupation of Mother	3	3.71	0.294(NS)
7	Education of father	2	3.02	0.221(NS)
8	Occupation of father	2	6.27	0.04(S)
9	SES	2	9.16	0.01(HS)

From table no 2, it clear that out of 120 children under the age 5, 34(28.3%) of them had diarrhoea and 86(71.7%) had no diarrhoea

DISCUSSION

The present study was conducted among the children's under the age 5 years visiting OPD at al-Ameen medical hospital, Vijayapur. In this study, it was seen that Prevalence of diarrhoea among the children's under the age of 5 years was 28.3% which was very high. Off these 73.5% were occurred in rural area and this was an alarming situation. Research investigator found that,prevalence of diarrhoea and especially its occurrence in rural area among the children under the age 5 was very high in comparison with all referred studies.

Conclusion The prevalence of diarrhoea among the children's under the age of 5 years was found to be 28.3%. It was clear from the table no 3 that, the prevalence of diarrhoea among the children's under the age 5 years were highly significantly associated with socio-demographic factors such as age of mothers, religion, gender of baby, education of mother, SES while no of students and occupation fathers were significantly associated with prevalence of diarrhoea among the children's under the age of 5 years. Prevalence was not associated with socio-demographic factors with Occupation of Mother, Education of father.

CONCLUSION

From the present study, it was concluded that, off the 28.3% of diarrhoea cases, 73.5% of them were from rural area. Addressing these issues holistically is vital to reduce the incident and impact of diarrhoea among the children under the age of 5 years in rural area. Ultimately, the findings of this study will contribute to a better understanding of how socio-demographic factors impact child health and will aid in the development of strategies to mitigate health disparities among vulnerable populations.

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