DENGUE FEVER AMONG PEDIATRIC POPULATION : A RETROSPECTIVE STUDY

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ABSTRACT *A Retrospective study of dengue fever among pediatric age group at selected tertiary care hospital. The objectives are to determine the dengue fever among pediatric age and find out the association between the prevalence and mortality .A Sample of 34 dengue fever who fulfilled the inclusion criteria were selected for the study and infant- 4 (11.7%), toddler- 2 (5.8%), preschooler- 1 (2.9%),schooler - 8 (23.5%), adolescent- 19 (55.8%). The age of children are affected in under five children is 6, preschooler children 9, adolescent children 19. An extensive review of literature and guidance by experts formed the foundation to the development of the study.The data collection for the study was done. Collected data was tabulated and analyzed. . The mean value is 22.29 and the frequency distribution is the study shows that 82% dengue fever, dengue hemorrhagic fever 8.8%.*

Keywords: *Dengue fever, Pediatric age group, Retrospective study*

INTRODUCTION:

"PREVENTION IS BETTER THAN CURE"

-UNKNOWN AUTHOR

Dengue is currently regarded as most rapidly spreading mosquito borne viral disease in the world .Dengue fever is caused by dengue virus and exhibiting the symptoms of fever,myalgia, arthralgia,and skin rash.severe dengue infection can lead to dengue hemorrhagic fever and dengue shock syndrome.According to WHO,an estimated 50million dengue infection occur annually and approximately 2.5 billion people live in dengue endemic countries.Seasonal variations in temperature and rainfall have been associated with levels of dengue infection,where the number of dengue cases increases with higher rainfall and temperature.

Yearly tentative incidence is about *10 million dengue cases each year, though dengue fever has been known to be in real fact in India for a longtime ,statistics shows that dengue cases has increased in the last 5-6years.*The infected mosquito is mainly active and virulence during day time but the bite may not be unnoticed. After injected to an on carrier it takes about 3-14 days to exhibit the sign and symptoms.

Statement of the Problem:

A retrospective study on dengue fever among pediatric age groups in medical record department at selected tertiary care hospital.

Objectives:

1. To assess the prevalence and mortality of dengue fever among pediatric age groups
2. To find out the association between prevalence and mortality of dengue fever among pediatric age groups with selected demographic variables.

METHODOLOGY:

RESEARCH APPROACH:

Quantitative, evaluative, approach.

RESEARCH DESIGN:

Non experimental descriptive retrospective design was used to conduct the study.

POPULATION:

Data related to Dengue fever among pediatric age groups was obtained from the Medical Records at Medical Record Department in CHRI.

SAMPLING TECHNIQUE:

Convenient sampling technique were adopted for this study.

SAMPLE SIZE:

Data on Dengue Fever among pediatric age groups were collected for the period of 1 year (March 2016 to March 2017). 34 samples were collected

SAMPLING CRITERIA

A.INCLUSION CRITERIA

The study includes data on dengue fever from March 2016 to March 2017

PLAN FOR DATA COLLECTION PROCEDURE

The researcher planned to collect the data for the period of one week.

Prior permission and Written consent was obtained from medical record department before conducting the study CHRI , necessary data was copied into data sheet from the register which are available from March 2016 to March 2017about cases of dengue fever.

SELECTION & DEVELOPMENT OF STUDY INSTRUMENT

TOOL DESCRIPTION

Part 1

Determine the Age, Gender, Area of Residence.

part 2

Length of stay, type of dengue, dengue mortality

RESEARCH TOOL:

There are two section (A&B) in research tool, in which section A includes selected demographic variable of pediatric age group,where as section B includes the medical record department.

Scoring Interpretation:

High score to signify severe affect and mild affect to dengue fever

Severe affect person to the dengue hemorrhagic fever 3

Moderate affect person to the dengue fever 31.

PLAN FOR DATA ANALYSIS:

Descriptive Statistics like:

Frequency distribution, mean and standard deviation.

Inferential statistics like:

Chi-square test was used.

RESULTS:

Table - 1 Mean Percentage of dengue fever among pediatric age groups

N=34

S.NO	CHARACTERISTICS	NUMBER OF SAMPLE	SCORE RANGE	TOTAL SCORE		MEAN	MEAN%
1.	MODERATE	34	0-20	31	43	20.29	59.6%
2.	SEVERE		21-25	3			

FIGURES 1:Percentage Distribution Of Severity Of Dengue Among Pediatric Age groups

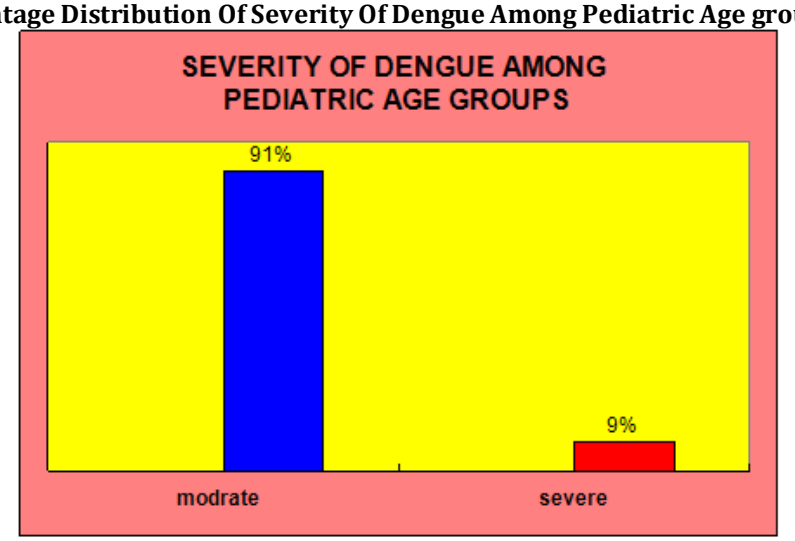

Table-2 Association of demographic variable of pediatric age group with over all aspect of dengue fever.

S. No	Characteristics	Category	No. Of. Sample	Severe affect	Moderate affect	Chi-square value and P value
1.	Age	1month to 1 year (infant)	4	0	4	Calculated value 3.36>table value 0.3 Significant at0.05Level
		1 years to 3 years (toddler)	2	0	2	
		3 years to 6 years (Preschool)	1	1	0	
		6 years to 12 years (schooler)	8	1	7	
		12 years to 18 years (adolescent)	19	1	18	
2.	Gender	Male	27	3	24	Calculated value 3.84 >table value Accepted at 0.05Level (P)
		Female	7	0	7	
3.	Area Of Residence	Urban	30	3	27	Calculated value 2.71>table value 0.3, Significant at0.05Level
		Rural	4	0	4	
4.	Length of stay	>10 days	4	3	1	Calculated value 2.71>table value 0.3, Significant at0.05Level
		<10 days	30	0	30	
5.	Type of dengue	Dengue Fever	31	3	28	Calculated value 2.71>table value 0.3, Significant at0.05 Level
		Dengue hemorrhagic Fever	3	0	3	
6.	Mortality	Yes	0	0	0	Calculated value 2.71>table value 0.3, Significant At 0.05 Level
		No	34	3	31	

Finding of the study:

Totally 34 samples were collected. There are 3 (8.82%) Severe dengue hemorrhagic fever & 31 (91.1%) moderate dengue fever cases were identified .area of residence 30 were belongs to urban and 4 cases belongs to rural area.Gender of pediatric dengue shows as follows male 27 (70.5%) female pediatric

dengue fever 7(20.5%). Pediatric age group and dengue fever shows as follows 1month to 1 year 4 (11.7%),1 year to 3 year 2 (5.8%),3year to 6 year 1 (0%), 6year to 12year 8 (20.5%),12year to 18 year 19(53%).

Conclusion:

The current study provides an update and more inclusive data on age, gender, type of dengue fever among pediatric age groups. Furthermore, these data could be used as base-line information for the comparison in futuristic research.

Proper health education can reduce the number of dengue fever cases and through implementing this we can minimize and even prevent the childhood dengue fever in future.

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