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FREQUENCY OF DIARRHEA IN INFANTS UNDER 6 MONTHS IN PAEDS WARD OF BAHAWAL VICTORIA HOSPITAL, BAHAWALPUR

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Abstract:
Diarrhea is an increase in frequency of bowl movements or decrease in the form of stool (greater looseness of stool). In spite of changes in the frequency of bowl movements and looseness of stools can vary independently freely of each other.
Objective: *To find out the frequency of diarrhea in infants less than 6 months of age.*
Cross-sectional study (Descriptive Study)
Methods: *A hospital based descriptive study was conducted from 1st January to 1st March 2018 in Paeds ward of BVH Bahawalpur. Source of population was 100 children under six months of age. Data analysis was made manually and frequency of diarrhea was calculated.*
Results: *The frequency of diarrhea was more in infants of 0-2 months. The frequency was low in infants who were on exclusive breast fed. The diarrheal frequency was high in infants of rural areas. Female were showing resistance to diarrhea as compared to male. Hand washing before weaning breast fed and clean water supply must be there to reduce its occurrence*
Conclusion: *Breast feeding must be promoted to prevent diarrhea.*
Keywords: *Diarrhea, Exclusive breast feeding, Infant*

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INTRODUCTION:

Diarrhea may be characterized as "Abnormal frequency and liquidity from claiming fecal material" [5]. Infectious Diarrhea is a heading reason for morbidity and mortality around the world influencing large portions babies. Approximately 12 million kids on an average bite the dust before the age of 5 years [4]. Diarrhea is third oak basic reason for death under five kids responsible for 13% passings in this period group [2]. Unhygienic Also perilous nature's domain spot kids toward hazard from claiming death[6]. Intense diarrhea, enduring the middle of 1 What's more 14 days will be a not kidding reason for drying out and electrolyte imbalance in children. Although, Rotavirus is those mossy cup oak basic reason for Diarrhea in developing countries. The regular creatures being E-coli, shigella, E-histolytica, G-lambia Also C-Parvum. Some parasites are also the causative factors for claiming diarrhoea8. A amount of Components have been found with be connected with the event for Diarrhea in children in this developing world. Many of the factors are dependent on level of poverty of family & community as a whole. Baby nourishing and food preparation planning are really vital determinants [7]. A major proportion of diarrheal disease in the developing world is related to quality and quantity of drinking water and that also depend on the water source. Unsafe disposal of feces, waste water, and education level of house hold head and surface sources of water were determinants of diarrhea [10].

Diarrhea control programmed may be essential through the utilization about oral rehydration technique (ORT) also advancement about proper feeding throughout and what's more following after Diarrhea, weaning practices, moving forward water supply and sanitation what's more advancement for personage & domestic hygiene1. Poor sanitation, perilous water supply and insufficient personage cleanliness would those four non-vaccine intercessions recognized clearly and covered: advancement of breast feeding, enhancing answerable for 90% of Diarrhea occurrence [3].

Literature Review:

In a study, conducted in D.I. Khan on the topic of "Factors affecting the frequency of infantile diarrhea". Diarrhea was more common 84% in formula feds as compared to breast fed infants 16%[11]. Infants belonging to rural population suffered more (60%) than urban (40%) [11]. Literacy level was only 22%. In Sub-Sahoran Africa, a cross sectional study of fiko-cameron 602 children's data was collected. Most of the participants(53%) lived in clean environment.37.2% fetched water from sources such as well, river, 45.7% fetched drinking water from taps. 66.6% of children used portable toilet facilities.74.4% care giver have knowledge of safe water and the prevalence rate of diarrhea under 2 years of age was 23.8%. In Uganda study on socio-demographic characteristics of children with and without diarrhea, children having less than 1 year of age have 24.9% diarrhea more in rural(74.2%) as compared to urban(25.28%), mother education at primary level is more than illiterate or higher education.

In study conducted in CMH Multan on "Is there any link between maternal education and childhood diarrhea. The frequency of diarrhea in the breast fed group for the uneducated mother is more 2.8182 than highly educated (0.417) [14].

MATERIALS AND METHODOLOGY:

A hospital based descriptive study was conducted from 1st January-1st march 2017 in paeds unit 1 BVH Bahawalpur. Sample population of the study was 100 children below the 6 months of age paeds 1 inpatient and outpatient. Simple random sampling was applied to select the children less than 6 months of age. Children below 6 months of age and mothers willing for interview were our inclusion criteria. Children above the 6 months of age, children with emergency condition or having marasmus disease and non-willing mothers, were our exclusion criteria. In questionnaire mothers education, residential area of participant, type of feed, hygienic measures used by mothers were more focus. A predesigned questionnaire was used to collect the data by medical students of 4th year. Training was given to data collectors from supervisor and teaching staff of community medicine. Data collection was checked by supervisor on daily basis. Questions regarding topic under study after taking consent were first translated into local language of the concerned participants (Saraiki, Punjabi, Urdu) to increase participants-collectors relationship for getting true results. After getting the data, data was processed, (analyzed). Analysis was made manually, frequencies were calculated and table was made. The study was ethically first approved by Head of Department of Community medicine QAMC and Head of Department of Paeds units 1. The oral consent was attained by mothers (guardians) of study participants and confidentially was assured.

RESULTS:

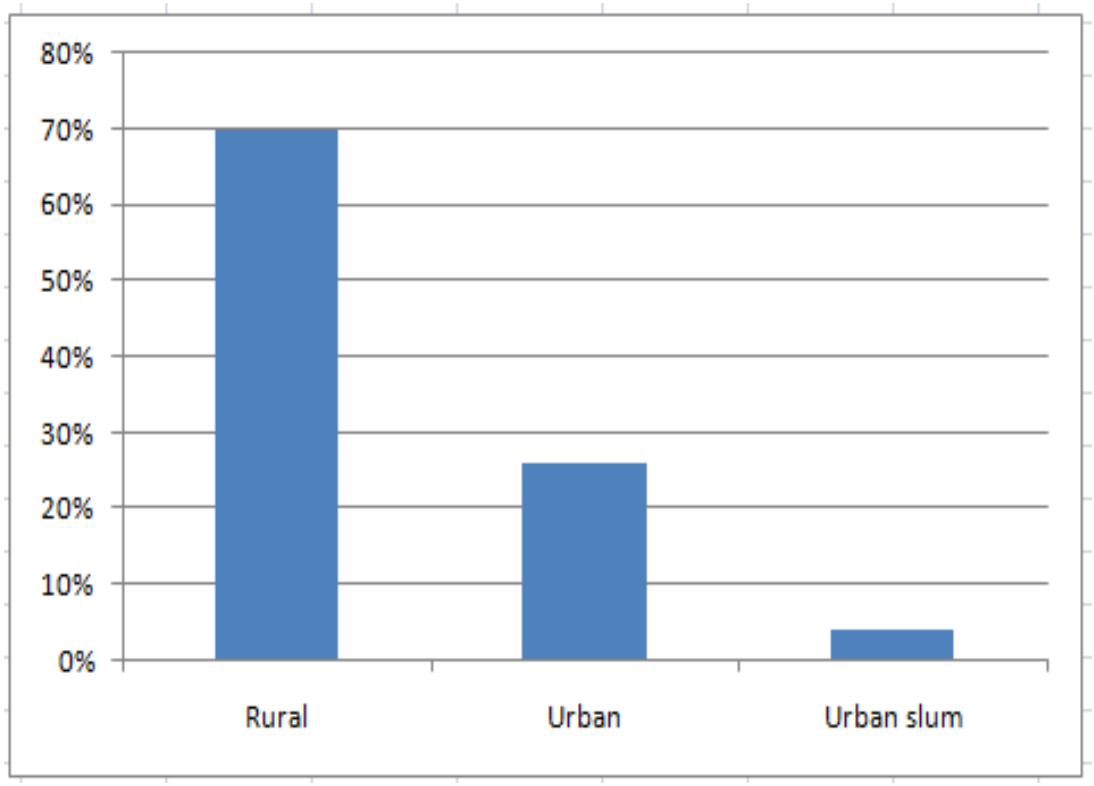
I conducted study on the frequency of diarrhea in infants under 6 Month of age in paeds unit 1, BVH Bahawalpur.
We collected data from 100 people, 60% among them were male & 40% were females. Regarding diarrheal episodes, we divided the age into 3 categories, among them, 45 (45%) were in age limit (0-2 months) ,21 (21%) were in age limit (2-4 months) and 34(34%) were in age limit (4-6 months).Max frequency of diarrhea was seen in first 2 months of life.(Mentioned in table)

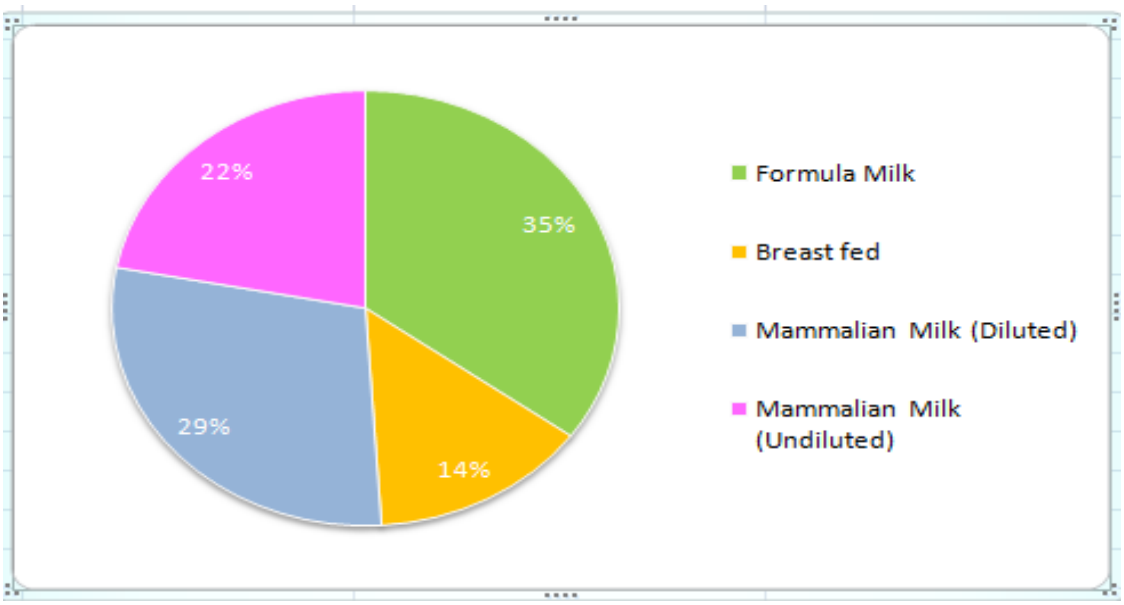
Regarding residential area, 70 (70%) were living in rural areas, 4 (4%) were living in urban slums and 26(26%) were living in urban areas. Rate of occurrence of 1st diarrheal attack & subsequent attacks is greater in rural areas. (Mentioned in table)

Regarding mother education, 62 (62%) mothers were illiterate, 24(24%) were under matric and 14 (14%) were above metric or graduated. Infants of illiterate mother have more attacks of diarrhea. (Mentioned in table)

Regarding feeding habits, 35 (35%) infants were on formula milk, 14 (14%) were on breast fed, 29(29%) were on mammalian diluted milk and 22(22%) were on mammalian undiluted milk. Frequency of diarrhea was very low in Infants who were on exclusive breast fed. (Mentioned in table). Regarding the mother of infants, 68% were not in habit of washing hands before feeding and 32 (32%) were in habit of washing their hands. Frequency of diarrhea was more in infants whose mothers were not in habit of washing hands before feeding. (Mentioned in table)

Regarding the water source, 96 (96%) infants were on tap water and 4 (4%) were on mineral water. Frequency of diarrhea was more in infants taking tap water. (Mentioned in table)





Variables & Frequency of Diarrhoea:

Sr. no.	Variables	Episodes since birth					
		Ist	2nd	3rd	4th	More	Total
1.	**Age of infant**						
a.	0-2 months	20 (20%)	7(7%)	8(8%)	2(2%)	8(8%)	45 (45%)
b.	2-4 months	10 (10%)	2(2%)	1(1%)	2(2%)	6(6%)	21 (21%)
c.	4-6 months	10 (10%)	6(6%)	5(5%)	4(4%)	9(9%)	34 (34%)
2.	**Surroundings**						
a.	Urban	9(9%)	3(3%)	4(4%)	1(1%)	19 (19%)	26 (26%)
b.	Rural	29 (29%)	11 (11%)	10 (10%)	7(7%)	13 (13%)	70 (70%)
c.	Urban slum	2(2%)	1(1%)	0(0%)	0(0%)	1(1%)	4(4%)
3.	**Education of mother**						
a.	Illiterate	23 (23%)	10 (10%)	7(7%)	6(6%)	16 (16%)	62 (62%)
b.	Under metric	15 (15%)	2(2%)	4(4%)	0(0%)	3(3%)	24 (24%)
c.	Metric or higher	2(2%)	3(3%)	3(3%)	2(2%)	4(4%)	14 (14%)
4.	**Feeding habits**						
a.	Breast fed	3(3%)	1(1%)	2(2%)	1(1%)	7(7%)	14 (14%)
b.	Formula milk	16 (16%)	5(5%)	6(6%)	3(3%)	5(5%)	35 (35%)
c.	Mammalian diluted milk	14 (14%)	6(6%)	2(2%)	1(1%)	6(6%)	29 (29%)
d.	Mammalian undiluted milk	7(7%)	3(3%)	4(4%)	3(3%)	5(5%)	22 (22%)
5.	**Hand washing**						
a.	Yes	14 (14%)	4(4%)	6(6%)	1(1%)	7(7%)	32 (32%)
b.	No	26 (26%)	11 (11%)	8(8%)	7(7%)	16 (16%)	68 (68%)
6.	**Water source**						
a.	Tap water	40 (40%)	14 (14%)	13 (13%)	6(6%)	23 (23%)	96 (96%)
b.	Mineral water	0(0%)	1(1%)	1(1%)	2(2%)	0(0%)	4(4%)

DISCUSSION:

The objective of our research was to determine the frequently of diarrhea in infants below 6 months in Paeds Unit 1, Bahawalpur Victoria Hospital.

In our Research, the frequency of diarrhea was more in infants of 0-2 months of age. In a similar study conducted in Ethiopia, the results were same like. According to our research, the frequency of diarrhea was common in formula fed as compared to breast fed. In a similar study conducted in D.I. Khan, diarrhea was more common in formula feds (84%) as compared to breast fed infants (16%). In our research, the frequency of diarrheal disease was more in infants of rural Areas (70%). In a similar study conducting in D.I. Khan, the rural population suffered more 60% than Urban 40%. Regarding the educational status of mother, our research shows that 62% mothers were illiterate & literacy rate was only 38%. In a similar study conducted in D.I. Khan, literacy rate was only 22%. Regarding the water source and its effect on frequency of diarrhea, 96% infants taking tap water were having diarrhea. In a similar study conducted insub-saharan Africa, the 45.7% infant's fetched drinking water from taps.

Regarding the effect of hand washing on frequency of diarrhea, 68% mothers were not in habit of washing hands before weaning and 32% were in habit of washing hands. In a similar study, conducted in Ethiopia, 70.1% mothers were not in habit of washing hands before weaning.

CONCLUSION:

.Our research highlights the importance of relation of mother education, living area and breast feeding with the frequency of diarrhea. Frequency of diarrhea is more in illiterate mothers families living in rural area, feeding on formula milk than literate mother families living in urban area and feeding on breast milk respectively.

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