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LETTER TO EDITOR

Need To Estimate The Prevalence Of Persistent/Chronic Diarrhoea In Children Living In Vulnerable Communities In North India

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Multiple infections and environmental factors leading to tropical enteropathy have significant impact on growth and nutritional status of children in developing countries [1].

Management of children with persistent and chronic diarrhoea at small community hospitals in India poses significant challenges due to lack of laboratory facilities, economic restraints for specialized tests and unwillingness and negative parental attitudes making referral to higher centres difficult [2]. I share data on unknown and uncertain outcomes in children with chronic/persistent diarrhoea observed at two charitable community hospitals in North India.

Data on baseline characteristics, anthropometry, clinical signs and symptoms, follow up growth indices (whenever available) was collected prospectively from children presenting with chronic and persistent diarrhoea at out-patient departments of two charitable trust hospitals in different states of north India. The study hospitals were exactly similar settings catering to poor and vulnerable sections of the society. Data was collected in two distinct time-periods: January-November 2004 from Agra in Uttar Pradesh and March-April 2007 from Faridabad, Haryana. Methodology, inclusion and exclusion criteria and definitions of chronic and persistent diarrhoea have been described in detail in an earlier publication [3]. Characteristics of children who came only for the initial visit and were lost to follow up with uncertain and unknown outcomes are presented in the present communication.

A total of ninety-four children with persistent and chronic diarrhoea were seen during the two time-periods. Seven of these children were seen in free rural camps held in the two regions. Seventy-five (80%) of these children formed part of an earlier study [2]. Eleven children (11.7%) [95% CI 6.0%-20%] did not follow up and their short and long term outcomes remained unknown. Baseline characteristics and clinical variables of these children are shown in [Table/Fig 1].

All of these eleven children were from families living in absolute poverty (rickshaw pullers, daily wage earners, immigrants from the other poor states living in urban slums). Most of these were seen in free rural camps. Parents of these children would take medical advice for the first time, would just want free medicines and then disappear not coming for further treatment and follow up. It was especially sad to note that there were children with severe complications like keratomalacia who did not come for follow up.

Even though special attention was paid to counsel families to go to district hospitals and public funded community hospitals the attitudes and social problems were overwhelming to make one certain that they would not be able to make it for medical care themselves. Also since these children were seen as part of philanthropic efforts it makes one to speculate that the prevalence of chronic and persistent diarrhoea may be very high among vulnerable communities, and what is seen reflects only tip of an iceberg.

Table/Fig 1: Baseline characteristics and clinical variables of children lost to follow up

Age (yrs)	Sex	Weight (Kgs)	*Height (percentile)	Diagnosis Chronic/ Persistent Diarrhea	Likely Etiology	Clinical Pallor	Vitamin Deficiency
5	F	10.5	<3	Chronic	Tropical enteropathy	+	Keratomalacia
3	M	8	<3	Chronic	Tropical enteropathy	+	Bitot spots
2.5	M	6	<3	Chronic	Tropical Enteropathy	+	-
2	F	5.5	<3	Chronic	Gluten-sensitive enteropahty	+	Bitot spots
2.5	M	7	<3	Chronic	Tropical enteropaty	+	Rickets
1.5	F	6	<3	Chronic	Disseminated koch's	+	Bitot spots
6	F	12	10	Chronic	Tropical enteropahty	+	Rickets
2	M	8	<3	Persistent	Post Gastroenteritis	+	-
1.5	F	7.5	<3	Persistent	Post gastroenteritis	+	-
3	F	6.5	<3	Persistent	Post gastroenteritis	+	-
3.5	F	7.5	<3	Persistent	Post gastroenteritis	+	-

* Using Agarwal's Growth charts for Indian children

This calls for effective implementation of public health programs on sanitation and hygiene to realize the goals of millennium development [4].

Most other children who were followed up for short durations were treated with an indigenously developed algorithm successfully [2]. Long-term follow up of these children is another major issue to ascertain the development and long term outcomes.

There is an urgent need to estimate the prevalence of persistent and chronic diarrhoea using cluster surveys in vulnerable communities of north India (especially villages and urban slums), and provide effective public-funded community or home-based management to these children. This is especially important as absolute poverty remain a major risk factor for adverse outcomes [5].

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