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Original Research Article

A study on the morbidity profile of children under 5 years of age and knowledge of parents regarding their health seeking behavior

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ABSTRACT

Objective: To study the morbidity profile of children under 5 years of age and knowledge of parents regarding their health seeking behavior.**Materials and Methods:** The study was a community based cross-sectional study. The study was conducted in the Field practice area of Rural Health Training Centre (RHTC) of Hind Institute of Medical Sciences, Barabanki. Families with at least one under five-year child, all family willing to participate and consenting and families residing in the study site for the minimum last 1 year were included in the study. A total of 400 subjects were included in the study. Door to door visit was done for data collection.**Results:** Morbidity was almost nil in 0-2 months preceding the interview. Diarrhoea was most common morbidity during 2 months – 5 years preceding the interview. Government hospital for treatment was preferred by 53.5% of the respondents. Treatment at government hospital was taken by 55% of the respondents. Secondary level of care was available in 50.2% of the respondents. Only 2.2% of the respondents reported any problem with the treatment. Hospital was visited by 65% of the respondents for the treatment. Child's last illness was 3-6 months in 52.8% of the respondents and Diarrhoea was the most common type of illness. 62.8% of the respondents visited government hospital for the treatment of child. More than one third of respondents visited health facility by bicycle (42.8%) and 24.5% approached by walking. Time taken to reach health facility was 15-30 minutes in 51% of the respondents. The main reason to choose particular health facility was Trust over the provider of the facility (41.5%).**Conclusion:** This study demonstrates the importance of maternal perception of illness severity in determining facility based care seeking for childhood illness in rural area.This is an Open Access (OA) journal, and articles are distributed under the terms of the [Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License](https://creativecommons.org/licenses/by-nc-sa/4.0/), which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.For reprints contact: reprint@ipinnovative.com

1. Introduction

Infant mortality and morbidity are global health problems requiring strategic policy, programming, and investments. A report indicates 75% of all under-fives deaths occurred during their first year of life. Indeed, the leading medical causes of infant and child deaths are the acute childhood illnesses which include acute respiratory infections, diarrhea, malaria, and meningitis (WHO, 2015).¹

The survival of an infant from the physical stressors associated with acute illness is dependent on identification of cues for the illness, time lag, and the decision to seek expert help by the caregiver “the so called health seeking behavior” (Olenja, 2003; Chandwani and Pandor, 2015).^{2,3}

Delay in seeking health care for a sick infant has been attributed to several factors for example, combining home remedies with conventional treatments, inability to identify life-threatening illnesses and lack of knowledge. These challenges exist against a background of undiagnosed serious life threatening illness such as diarrhea, malaria,

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and meningitis. The results for such unverified and/or not scientifically tested interventions are catastrophic with resultant mortality and/or complications (WHO, 2015).¹

People tend to go to private practitioners in the belief that they provide rapid cure. Because of this the infants are devoid of getting high quality healthcare services offered by the hospitals and nurseries. The reason for this may be found by studying the behavioural pattern of parents. A significant gender differences in perception and treatment seeking for illness have been documented by some studies (Willis et al, 2009; Malhotra and Upadhyay, 2013).⁴⁻⁶

In India, there is a coexistence between the public and private health-care facilities. A vast majority of the parents seek health care from the private facilities. Government or public sector facilities were preferred less due to lack of trust in the doctors and poor care by doctors at the primary health-care level. Many parents treated their children at home and sought health care later on if the symptoms did not alleviate. It has been found that 22.8% of urban dwellers still seek health care from faith healers (Sreeramareddy et al, 2012; Shah et al, 2013).^{7,8}

The present study was conducted to study the morbidity profile of children under 5 years of age and knowledge of parents regarding their health seeking behavior.

2. Materials and Methods

The study was a community based cross sectional study. The study was conducted in the Field practice area of Rural Health Training Centre (RHTC) of Hind Institute of Medical Sciences, Barabanki. Ethical clearance was sought by the Ethical Committee of the institute before starting commencement of the study. A total of 400 subjects were included in the study.

Families with at least one under five year child, all family willing to participate and consenting and families residing in the study site for the minimum last 1 year were included in the study. Family not willing to or not available for interview on account of absence or door-locked, families not having <5y old children, families not residing since 1 year and newborns were excluded from the study.

2.1. Methods

A predesigned and pretested semi-structured questionnaire which included the characteristics of respondents such as age of the respondent, sex of the respondent, type of family, literacy status, occupation of head of family, socio-economic status, religion, caste, health status of respondent, preference of the health care facility, reason for availing that particular health care facility were collected.

2.2. Statistical analysis

The results are presented in frequencies and percentages. All the analysis was carried out on SPSS 16.0 version (Chicago,

Inc., USA).

3. Results

Morbidity was almost nil in 0-2 months preceding the interview. Diarrhoea was most common morbidity during 2 months – 5 years preceding the interview (Table 1).

Government hospital for treatment was preferred by 53.5% of the respondents. Treatment at government hospital was taken by 55% of the respondents. Secondary level of care was available in 50.2% of the respondents (Table 2).

Table 1: Distribution of morbidity profile of children under 5 years of age

Morbidity profile	No. (n=400)	%
0-2 months		
None	395	98.8
Diarrhoea	1	0.2
Pneumonia	1	0.2
Fever	3	0.8
2 months-5 years		
None	7	1.8
Pneumonia	18	4.5
Diarrhoea	195	48.8
Malaria	4	1.0
Measles	174	43.5
Fever	1	0.2
Anemia	1	0.2

Table 2: Distribution of health seeking behavior of parents of their children

Health seeking behavior	No. (n=400)	%
Treatment Preference		
Government	214	53.5
Private	178	44.5
Allopathy/Ayush	3	0.8
Others (Self, chemist shop, faith based)	5	1.2
Treatment Sought		
Government	220	55.0
Private	88	22.0
Chemist shop	27	6.7
Self-medication	41	10.2
Faith based	24	6.0
Type of facility/ Level of care		
Tertiary level	79	19.8
Secondary level	201	50.2
Primary level	120	30.0
Treatment Complied		
Yes	191	47.8
No	209	52.2

Only 2.2% of the respondents reported any problem with the treatment. Hospital was visited by 65% of the respondents for the treatment. Child's last illness was 3-6 months in 52.8% of the respondents and Diarrhoea was

Table 3: Distribution of General use of health care facilities by parents

General use of health care facilities	No. (n=400)	%
Any problem with the treatment		
Yes	9	2.2
No	391	97.8
Visited to type Health facility		
Health centre	46	11.5
Hospital	260	65.0
Other doctor (private)	30	7.5
Pharmacy	23	5.8
Other healers	41	10.2
Difficulties in Health Facilities		
Yes	17	4.2
No	383	95.8
When was child last ill		
<1 month	144	36.0
1 month-3 months	45	11.2
3-6 months	211	52.8
Type of child illness		
Diarrhoea	191	47.8
Fever/Cough	184	46.0
Pneumonia/ARI	20	5.0
Others	5	1.2
What was Done?		
Went to Govt. hospital	251	62.8
Went to private hospital	52	13.0
Others	97	24.2

the most common type of illness. 62.8% of the respondents visited government hospital for the treatment of child (Table 3).

More than one third of respondents visited health facility by bicycle (42.8%) and 24.5% approached by walking. Time taken to reach health facility was 15-30 minutes in 51% of the respondents. The main reason to choose particular health facility was Trust over the provider of the facility (41.5%) (Table 4).

4. Discussion

One of the key strategies of IMNCI is the education of the mothers/caregivers on the signs of severe illness for which the child should be immediately taken to the health facility. Prompt recognition and treatment with an effective drug have a crucial role in childhood pneumonia, as the case fatality rate in untreated children is high (sometimes exceeding 20%) and death can occur after 3 days of illness. The timings of the mother's decision to seek medical care depend on her and how family understands of the severity of the child condition (Minz et al, 2017).⁹

One tenth of care seeking involved self-medication through private pharmacies, typically as the only source of care though occasionally followed by facility-based care. While pharmacies may provide care for mild childhood

Table 4: Distribution of approaching health care facilities by parents

Approaching health care facilities	No. (n=400)	%
Means to reach Health Facility		
Walking	98	24.5
Bicycle	171	42.8
Transport services	97	24.2
Own vehicle	28	7.0
Ambulance	6	1.5
Time to reach the nearest Health Facility		
<15 minutes	105	26.2
15-30 minutes	204	51.0
31-60 minutes	81	20.2
>60 minutes	10	2.5
Reason to choose Particular Health Facility		
Trust over the provider of the facility	166	41.5
Near to home	160	40.0
Affordable	29	7.2
Staff availability and cooperation	25	6.2
Good quality treatment	15	3.8
Less time consuming	5	1.2
Time gap between visit to Health Facility		
On the same day	219	54.8
One day	124	31.0
Two days	43	10.8
Three days	14	3.5

illness (eg, oral rehydration therapy for diarrhea), the quality of services they provide is often low and has been linked with medication misuse (Smith, 2009; Porter and Grills, 2016).^{10,11}

In this study, morbidity was almost nil in 0-2 months preceding the interview. Diarrhoea was most common morbidity during 2 months – 5 years preceding the interview. Marsh et al (2020)¹² found that fever was reported in 83% of instances of child illness, followed by cough (64%) and diarrhea (19%). Childhood illnesses were frequently multi-symptomatic (60%) with combined fever and cough accounting for half of all reported illness episodes. Minz et al (2017)⁹ found that out of total 1065 children surveyed, 240 children reported cough/cold within 2 weeks preceding the survey. Among these, 52 children had cough with difficult and/or fast breathing. The prevalence of childhood pneumonia (integrated management of neonatal and childhood illness [IMNCI]) was 4.9%, within 2 weeks preceding the survey.

In this study, only 2.2% of the respondents reported any problem with the treatment. Hospital was visited by 65% of the respondents for the treatment. Child's last illness was 3-6 months in 52.8% of the respondents and Diarrhoea was the most common type of illness. 62.8% of the

respondents visited government hospital for the treatment of child. Mittal et al (2018) reported that in the section of responses in reference to disease for which treatment is sought, maximum number of mothers responded that they would opt for home remedies for common illnesses; except for convulsions, where 46.5% mothers would prefer to visit a healthcare personnel. Similar was the response even in urban area in the study conducted by Friend-du Preez et al (2013),¹³ where the care givers reported that they would resort to home remedies particularly for diarrhoea and constipation.

This study observed that government hospital for treatment was preferred by 53.5% of the respondents. Treatment at government hospital was taken by 55% of the respondents. Secondary level of care was available in 50.2% of the respondents. Mittal et al (2018)¹⁴ reported that out of the 303 mothers interviewed, 108 (35.6%) preferred to go to Public health facility, 181(59.7%) endorsed private health provider and 4.6% i.e., 14 preferred traditional healer. Willis JR et al (2009), in their study reported that 75% of the mother stated that private healthcare providers (qualified or otherwise) were best. Whereas, only 16% said that public care providers are best. The percentage of mother preferring private health provider over public health provider was very high in the study of Willis JR et al (2009) as compared to our study (75% vs 44.5% in the present study). Corresponding percentage for preference of public health provider in present study (53.5%) was more than that observed by Willis JR et al (2009) (16%). Marsh et al (2020) reported that care was sought from a health facility during 71% of illness episodes overall, increasing from 47% for non-severe illness to 88% for somewhat severe illness and 100% for very severe illness. Care was primarily sought from the private sector across all severity strata with all episodes of very severe illness seeking care exclusively from the private sector.

There are two medical colleges in nearby where the study was conducted including this college. Also the study was carried out in villages adopted by the Department as a part of comprehensive health services. Hence frequent visits by the social worker and Medical students might have helped in developing confidence in healthcare facilities. Deshmukh PR et al (2009)¹⁵ in their post survey Focus Group Discussions (FGDs) with mothers have mentioned that one of the important cause for not accessing government health facilities was lack of faith in government health services. And the reasons stated being unavailability of doctors at the primary healthcare level like subcentres/ primary health centres, at the tertiary level poor care by doctors and nurses, lack of medicines and equipments and finally no relief with the treatment offered at these centers.

In the present study, more than one third of respondents visited health facility by bicycle (42.8%) and 24.5% approached by walking. Time taken to reach health facility was 15-30 minutes in 51% of the respondents. The main

reason to choose particular health facility was Trust over the provider of the facility (41.5%). Pandey A et al (2002),¹⁶ from the study in rural community of West Bengal, where they concluded that parents travelled longer distances (3.3 km for boys vs. 1.6 km for girls) to consult qualified health professionals more often ($p=0.0094$) for boys.

In the study by Marsh et al (2020),¹² the most common care-seeking pattern overall and within each illness stratum was a single visit to a private provider, accounting for two thirds of care-seeking for non-severe cases and increasing to 79% among very severe cases. The second most common pattern overall and among somewhat severe and very severe cases was care-seeking from two or more private sector providers, while the second most common pattern for non-severe illness was care-seeking exclusively from pharmacies and drugstores (18%).

There were some limitations of this study. The study was conducted only among rural population and not included urban population. There might have been an investigator effect. The mothers might have told mostly the desirable things about traditional practices and that the possibility of misunderstanding of common local terms while entering it into the questionnaire.

5. Conclusion

This study demonstrates the importance of maternal perception of illness severity in determining facility based care seeking for childhood illness in rural area.

6. Conflict of Interest

The author declares no potential conflicts of interest with respect to research, authorship, and/or publication of this article.

7. Source of Funding

None.

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