Original Research Article

A study on health care seeking pattern of under five children in the rural field practice area of a medical college in Mandya District, Karnataka, India

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ABSTRACT

Background: Children below five year constitute 14% of total population in our country. They are vulnerable group deserving special health care. children are considered to be susceptible to host of disease and infection and the most important causes of under-five mortality are Acute Respiratory Infection (ARI), Preterm birth Complications, Diarrheal diseases, Intrapartum related complication, Malaria, Neonatal Sepsis, Meningitis and Tetanus. The objective of the present study was to study the health care seeking pattern of under five children in rural areas of Mandya District.

Methods: A cross sectional study was conducted at Adichunchanagiri Institute of Medical Sciences, Bellur Cross from January 2017 to June 2017. All the children under the age of five years in the Rural Field Practise area of the AIMS, were included in the study.

Results: Out of the 324 male children in present study only 90 (27.7%) of them had suffered from any kind of illness in the past three months of duration and 59 (29.4%) out of 201 Female children had fallen ill. Fever, Diarrhoea, Pnemonia were the most common illness seen among the children. The association between the gender and illness was found to be statistically not significant.

Conclusions: Large number of parents availed government service due to fact that large number of families belonged to lower socioeconomic class. IEC activities should be enhanced so as to change the behavior of 100% mothers to seek the timely reference from a qualified Doctor for the illness and proper adherence to the treatment.

Keywords: Health care, Illness, Treatment, Under five

INTRODUCTION

Every child has the right to live and be cared for by his or her parents. The responsibility for the child’s well-being relies on both the parents and the society. In Indian civilization too, the child is believed to be a gift of the God to be nurtured with love, care and affection not only within the family but also within the society as a whole.1

Realizing the importance of children, World Health Organization (WHO) has declared the themes relating to children in the following years.2

- 1951-Health for your Child and World’s Children.
- 1979- A Healthy Child a Sure Future.
- 1984- Children’s Health Tomorrows’ Wealth.
- 2005- Make Every Mother and Child Count.
Children below five year constitute 14 % of total population in our country. They are vulnerable group deserving special health care. children are considered to be susceptible to host of disease and infection and the most important causes of under-five mortality are Acute Respiratory Infection (ARI), Preterm birth Complications, Diarrheal diseases, Intrapartum related complication, Malaria, Neonatal Sepsis, Meningitis and Tetanus.

The Millennium Development Goal (MDG 4) aims to reduce under five child mortality by two-thirds between 1990 and 2015.

Around 82.2%, 66.5%, 71.7% of boys and 78%,60.8%,65.8% of girls were taken to health facilities for treatment of ARI and Diarrhea. 82.2%,73.2%,74.4% of the boys and 79%,72%,73.2% of the girls received treatment according to NFHS 1, NFHS II and NFHS III surveys respectively. The child disparity index (CDI) for ARI was 0.115,0.107,0.12 and for diarrhea 0.089,0.026,0.027 in NFHS 1, NFHS II and NFHS III survey’s respectively.

The objective of the present study was to observe the health care seeking pattern of under five children in rural areas of Mandya district

METHODS

A Cross sectional Study was done in the rural Field Practice area of Adichunchanagiri Institute of Medical sciences, B G Nagar, Mandya from January 2017 to June 2017. All the children under the age of five years in the Rural Field Practise area of the AIMS, were included in the study. Data was collected by interview technique from the mothers after explaining the purpose of the study and obtaining the consent in a pretested predesigned and semi structured questionnaire.

A landmark (temple, school, panchayat office etc) in the center of the village was identified. After selecting the street randomly near the landmark, starting from the right side of the street house to house visit was done and data was collected from the household who had children less than five years of age.

**Inclusion criteria**

- Parents who were willing to participate in the study.
- Parents who were the permanent residents of study area
- If the parents had more than one under five children, then the youngest child in the family will be considered for the study.

**RESULTS**

A total of 525 under five children was included in the study. In present study the maximum number of the children were between the 2-4 years of age. 88.9 % of the respondents were Hindu by religion and 61.7% of them were male. Majority (56.7%) of the subjects belonged to SES Modified B G Prasad class 4.

**Table 1: Socio demographic profile of the under five children.**

| Age group (in months) | Frequency (n=525) | Percentage (%) |
|-----------------------|-------------------|----------------|
| 0-11                  | 85                | 16.2           |
| 12-23                 | 106               | 20.2           |
| 24-35                 | 136               | 25.9           |
| 36-47                 | 125               | 23.8           |
| 48-59                 | 73                | 13.9           |

| Religion              | Frequency (n=525) | Percentage (%) |
|-----------------------|-------------------|----------------|
| Hindu                 | 467               | 88.9           |
| Muslim                | 39                | 7.4            |
| Others                | 19                | 36.2           |

| Sex                   | Frequency (n=525) | Percentage (%) |
|-----------------------|-------------------|----------------|
| Male                  | 324               | 61.7           |
| Female                | 201               | 38.3           |

| SES                   | Frequency (n=525) | Percentage (%) |
|-----------------------|-------------------|----------------|
| 1                     | 12                | 2.3            |
| 2                     | 38                | 7.2            |
| 3                     | 57                | 10.8           |
| 4                     | 298               | 56.7           |
| 5                     | 120               | 22.8           |

| Birth order           | Frequency (n=525) | Percentage (%) |
|-----------------------|-------------------|----------------|
| 1                     | 398               | 75.8           |
| 2                     | 125               | 23.8           |
| 3                     | 2                 | 0.2            |

| Type of family        | Frequency (n=525) | Percentage (%) |
|-----------------------|-------------------|----------------|
| Nuclear family        | 268               | 51.1           |
| Joint family          | 257               | 48.9           |

Nearly 75.85 of them were with Birth order 1 and 51.1% belonged to Nuclear Family. Out of the 324 male children in present study only 90 (27.7%) of them had suffered from any kind of illness in the past three months of duration and 59 (29.4%) out of 201 Female children had fallen ill. Fever, Diarrhoea, Pneumonia were the most common illness seen among the children.

**Table 2: Distribution of health status of children based on gender.**

| Suffered from any illness in past one month | Sex | Total |
|--------------------------------------------|-----|-------|
|                                            | Male | Female |  |
| Yes                                        | 90   | 27.7  | 59  | 29.4 | 149  | (28.4) |
| No                                         | 234  | 72.3  | 142 | 70.6 | 376  | (71.6) |
| Total                                      | 324  | 100   | 201 | 100  | 525  |       |

chi-square = 0.151, degrees of freedom = 1, probability = 0.697

The association between the gender and illness was found to be statistically not significant. Among the children who had suffered any illness 85 (94.4%) of male and 53 (89.8%) of females had sought treatment for the disease.
in the health care facility. 84.4% of male had sought treatment in government and 84.7% of females sought treatment in Government. Majority of them had sought treatment within 24 hours of the disease and this association was found to be statistically significant.

Table 3: Distribution of health seeking behavior of parents based on gender.

| Treatment given | Male (n=90) (%) | Female (n=59) (%) | P value |
|-----------------|-----------------|-------------------|---------|
| Yes             | 85 (94.4)       | 53 (89.8)         | 0.301   |
| No              | 5 (5.6)         | 6 (10.2)          |         |
| Type of hospital |                 |                   |         |
| Government      | 76 (84.4)       | 50 (84.7)         | 0.96    |
| Private         | 14 (15.6)       | 9 (15.3)          |         |
| Treatment seeking behavior |        |                   |         |
| Within 24 hours | 57 (63.3)       | 39 (66.1)         | 0.02*   |
| 1-2 days        | 16 (17.8)       | 17 (28.8)         |         |
| 3-4 days        | 17 (18.9)       | 3 (5.1)           |         |
| System of medicine |             |                   | 0.24    |
| Allopathy       | 88 (97.7)       | 59 (100)          |         |
| Ayurveda        | 2 (2.3)         | 0 (0)             |         |

The average distance travelled by the parents to seek treatment was 2.1 kms. For Male the mean distance covered for 2.9kms when compared to female children (1.1 km). The association between distance travelled and treatment seeking was found to be statistically significant.

Table 4: Distribution of children according to distance travelled to seek treatment.

| Distance travelled | Sex | Male (n=90) | Female (n=59) | P value |
|--------------------|-----|-------------|---------------|---------|
| <1 Kms             |     | 35 (38.8)   | 47 (79.6)     |         |
| 1-3 Kms            |     | 51 (56.7)   | 10 (16.9)     |         |
| 3-5 Kms            |     | 3 (3.4)     | 2 (3.5)       |         |
| >5 Kms             |     | 1 (1.1)     | 0 (0)         |         |
| Total              |     | 90 (100)    | 59 (100)      |         |

Table 5: Distribution of children according to Amount spent for treatment of illness.

| Amount spent | Sex | Male (n=90) | Female (n=59) | P value |
|--------------|-----|-------------|---------------|---------|
| Nil          |     | 15 (16.6)   | 19 (32.2)     |         |
| >1-100       |     | 59 (65.5)   | 26 (44.1)     |         |
| >101-250     |     | 13 (14.4)   | 11 (18.6)     |         |
| >251         |     | 3 (3.5)     | 3 (5.1)       |         |
| Total        |     | 90 (100)    | 59 (100)      |         |

Nearly 90 % of the children in both the gender has seek treatment for the disease in present study from a qualified medical professional, similar kind of results was also seen in study done by Suresh Sharma and B Ganatra and S Hirve.11,14 The association between seeking treatment and gender was found to not significant in all the studies.

Fever, Diarrhea and Pneumonia were the most common illness seen in both male and female children which is similar to the studies of Jeffrey R Wills and Salma Seth was in contrast to the findings of Jeffrey R Wills and Nilanjana Gosh.9,11,14,15 The findings of the study done by Anima Sen and Salma Seth in present study of male children fallen ill than male children. In the other studies done by Aparna Pandey et al and Jeffrey R Wills et al, more number of female children had fallen ill than male children which similar to present study findings.8,9

DISCUSSION

In present study the percentage of children who had fallen ill was 28.4% with a greater number of female children fallen ill than male children. In the other studies done by Jeffrey R Wills et al and Suresh Sharma, Jeffrey R Wills and Nilanjana Gosh.9,11,14,15 the percentage of children who had fallen ill was 28.4% with a greater number of female children fallen ill than male children which was similar to present study findings.8,9

Nearly 84 % of the children who had fallen ill were taken to government facility to avail the treatment. The findings in present study is very high when compared to the study done by B Ganatra and S Hirve, Suresh Sharma, Jeffrey R Wills and Nilanjana Gosh.9,11,14,15 The findings of the study done by Anima Sen and Salma Seth was in contrast to the findings of Jeffrey R Wills and Salma Seth was in contrast to the findings of Jeffrey R Wills and Nilanjana Gosh.9,11,14,15
average distance travelled by parents to seek treatment was 2.9 kms for male and 1.1 kms for female. The findings of present study showed lesser distance travelled by parents for treatment when compared to the findings of Aparna Pandey et al where 3.3kms for male and 1.6 kms for female was the average distance. In the study done by Dhanjaya Phatak the parents used to travel a mean distance of 3.8 for male and 3.1 for female children treatment.

The amount spent by parents on the treatment of the children was more for male children when compared to female children. Similar observation was made in the study done by Aparna Pandey et al, B Ganatra and SHirve, Jeffrey R Wills and Subhash Pokhreal.

**CONCLUSION**

Large number of parents availed government service due to fact that large number of families belonged to lower socioeconomic class. Being the fact that fathers used to leave the house for occupation very early and mothers being busy in household activities coupled with little or no education may be the reason for time lag in the initiation of treatment. IEC activities should be enhanced so as to change the behavior of 100% mothers to seek the timely reference from a qualified Doctor for the illness and proper adherence to the treatment.

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**REFERENCES**

1. Tewari S. Gender Discrimination among Children in Urban Slums. Department of Anthropology, University of Allahabad, India. Anthropol.2005;7(4):247-252.
2. State Institute Of Health and Family Welfare Jaipur. 2014. Available from http://sihfwrajasthan.com/Ppts/World%20Health%20Day.pdf
3. Park K: Park’s Textbook of Preventive and Social Medicine, 24th edition. M/s Banarsidas Bhanot Publishers, Jabalpur, India. 2017.
4. International Institute for Population Sciences (IIPS), 1995. National Family Health Survey (MCH and Family Planning), 1992-93: Government of India, Bombay: IIPS.
5. International Institute for Population Sciences (IIPS) and ORC Macro. 2000. National Family Health Survey (NFHS- 2), 1998- 99: Government of India, Mumbai: IIPS.
6. International Institute for Population Sciences (IIPS) and Macro International.2007. National Family Health Survey (NFHS-3), 2005-06: Government of India: Volume I. Mumbai: IIPS.
7. Sharma RK, Rani M, Sharma SK. Gender Inequality in Child Care in India: Is it narrowing down. Annual Meeting at PAA .Draft paper.2010.
8. Pandey A, Sengupta P G ,Mondal S K, Gupta D N ,Manna B, Ghosh S et al. Gender Differences in health care seeking During Common Illness in a Rural Community Of West Bengal, India. J Health Popul Nutr.2002.;20(4):306-311.
9. Willis JR, Kumar V, Mohanty S, Singh P, Singh V, Baqui AH, Awasthi S, Singh JV, Santosham M, Darmstadt GL. Gender differences in perception and care-seeking for illness of newborns in rural Uttar Pradesh, India. J Health, Population, Nutri. 2009;27(1):62.
10. Sen A, Seth S. Gender Identity of the Girl Child in South Asia. Canadian Women Studies.1995;15(2-3):58-63.
11. Ganatra B, Hirve S. Male Bias in Health care Utilization for Under-fives in a Rural Community in Western India. Bulletin of the World Health organization.1994;72(1):101-4.
12. Pokhrel S, Snow R, Dong H, Hidayat B, Flessa S, Sauerborn R. Gender role and Child Health care Utilization in Nepal. Health Policy.2005;74:100-9.
13. Ali SM. Gender and Health care Utilization in Pakistan. The Pakistan Development Review.2000;39(3):213-34.
14. Sharma S. Child Health and Nutritional Status of Children: The Role of Sex Differentials. Institute of Economic Growth. Population Research Centre.2005;262.
15. Ghosh N, Chakraborty M, Biswas R. Factors affecting the Healthcare- Seeking Behavior of Mothers regarding their Children in a Rural Community of Darjeeling District, West Bengal. International J Medi Public Health.2013;3(1):12-16.
16. Pathak D. Gender Disparity in Health and Nutritional Status In Children Under Five Years Of Age In a Rural Community: A Cross Sectional Study [MPH Thesis]. Belgaum; KLE University:2011.

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