



A Study to Assess the Knowledge and Practice of Parents Regarding Home Management of Minor Ailments in Children Visiting Tertiary Care Hospital Mangaluru

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Abstract

Background The nation's future depends on its children. Minor illnesses are a common occurrence during childhood. It is crucial to evaluate parents' knowledge and practice when it comes to dealing with minor illnesses. This study aimed to assess the knowledge and practice of parents regarding home management of minor ailments in children.

Methods The descriptive research design was adopted for this study. The sample consisted of 65 parents of under-5 children. The sample was selected on the basis of the purposive sampling technique. Data was collected using a knowledge questionnaire and practice checklist related to the management of minor illnesses in children including fever, upper respiratory tract infection (URTI; cough, cold, sore throat), diarrhea, vomiting, abdominal colic, and superficial wound. Data collected from the subjects were analyzed by descriptive and inferential statistics.

Results Study revealed that 80% had good knowledge, 20% had moderate knowledge, and none of them had poor knowledge on home management of minor ailments. In terms of practice, 55.4% of parents had moderate practice in the management of fever, 93.8% had good practice regarding the management of URTI, 43.1% had a good practice in managing diarrhea at home, 47.7% of parents had poor practice regarding home management of abdominal colic, 56.9% parents had a good practice on management of vomiting at home, and 92.3% had good practice score on managing superficial wounds at home. There was a significant association found with education status and knowledge score, as well as educational status and occupation with URTI practice and source of health information with fever at *p*-value less than 0.05 level of significance.

Conclusion The results of this study showed that parents of under-5 children had good knowledge and practice regarding home management of minor ailments.

Keywords

- ▶ knowledge
- ▶ minor ailments
- ▶ parents
- ▶ under-5 children

Introduction

Child is a person who is between the ages of birth and puberty, or between infancy and puberty in terms of development. Since children are the future of humanity's basic resources, their health has historically been of utmost concern to societies. The foundation for a child's physical and mental development is laid throughout the first 5 years of life. Children under this age group need special care because they account for 50% of all fatalities in India.¹

The most frequent occurrence in childhood experiences is having minor illnesses. Smaller illnesses can be treated at home. In managing their children's illnesses, parents have a crucial role to play. Parents' knowledge and parenting abilities may be impacted by suggestions from the media, families, friends, and other sources.²

Children's immunity, especially that of young children under the age of five, is still developing, making them susceptible to a number of illnesses brought on by bacteria, viruses, and other microorganisms. When this occurs, it's usually a good idea to combine medication with preventative measures and home remedies to hasten the healing process.³

Parental awareness of minor illnesses, including disease prevention, self-treatment, and inappropriate consultation with medical professionals, is very important. By treating mild diseases at home as soon as possible, safely, and effectively, complications and hospitalization rates can be reduced. Minor illnesses that are treated promptly and effectively can benefit from early intervention and disease impact reduction. Additionally, there is less strain on the healthcare system.⁴

In 2019, an estimated 5.2 million children under 5 died, mostly from preventable and treatable causes. There were 1.3 million fatalities in children between the ages of 1 and 4. In India, about 50% of childhood deaths are due to minor illnesses. About four in five children aged under 5 years are stunted in their growth due to malnutrition and minor illness. In Karnataka, the under-5 child mortality rate is 69.8/1000 live births and the child sex ratio (0.6 years) is 9495.⁵

As there are varied responses regarding home management of minor ailments, this study was carried out to assess both the knowledge and practice of parents regarding home management of minor ailments.

Materials and Methods

Study Design and Participants

The descriptive research design was adopted for this study. The sample was selected on the basis of the purposive sampling technique. Parents who are having under-5 children were included in this study. Parents whose child is critically ill and child who is accompanied by other than parents were excluded.

Sample Size Calculation

In order to estimate the proportion of parents having average knowledge level regarding home management of minor ailments, with the 10% level of significance and 10% margin of error, 65 subjects were included in the study. The calcula-

tions are done using G^* power. Sample size calculation was done based on the study conducted by Nair and Kumar.⁷

Ethical Consideration

The study was reviewed and approved on 2-10-2022 by the Ethics Committee of Yenepoya deemed to be university. Protocol number was YEC2/815. Permission to conduct the study was obtained from hospital authority. A subject information sheet was provided with a clear explanation about the study purpose and written informed consent was obtained before including the study participants. Confidentiality was assured to the study participant.

Instruments

The following tools were used to collect the data: (1) demographic proforma, it consists of age, gender, education status, occupation, type of family, religion, number of children, monthly family income, source of health information. (2) Structured knowledge questionnaire to assess knowledge of parents. The investigator developed the 26-knowledge questionnaire to assess knowledge of parents regarding home management of minor ailments in children, which included questions on fever, upper respiratory tract infection (URTI; cold, cough, and sore throat), diarrhea, vomiting, abdominal colic, skin abrasion/superficial cut wounds. (3) Checklist to assess the practice of parents regarding home management of minor ailments. The investigator developed 21 statements to assess the practice of parents regarding home management of minor ailments in children, which included yes or no, not encountered options.

Validity and Reliability of the Tool

To obtain the content validity of the tool, the prepared tool with objectives, operational definitions, hypotheses, a criteria checklist, and the blueprint of the tool were submitted to seven experts. The tool was found to be acceptable and valid after a critical examination by experts.

The reliability coefficient of the structured knowledge questionnaire was found to be 0.85, and the reliability coefficient of the practice checklist was 0.9, which indicated that the tool is reliable.

Data Collection

Data collection was done at the pediatric outpatient department of Yenepoya Medical College Hospital, Mangaluru. Data was collected from July 5, 2021 to August 20, 2021. A purposive sampling technique was used to recruit the participants to the study. A subject information sheet was provided with a clear explanation about the study purpose, then formal written permission was obtained from the study participant. They were instructed to fill the demographic proforma, knowledge questionnaire, and practice checklist related to the management of minor illnesses in under-5 children.

Data Analysis

The data were analyzed using Statistical Package for Social Sciences 20 (SPSS 20) software. The data were analyzed in terms of objectives and hypotheses of the study using both descriptive and inferential statistics.

Results

Demographic Proforma

This study revealed that the majority (46.2%) of the samples were of 25–36 years. Most (86.2%) of the samples were female. About 29.2% of the samples had primary school level education qualifications, and about 52.3% of them belonged to nuclear families, 53.8% of the samples were Hindus. Around 52.3% of the samples had more than 2 children. Most (78.5%) samples had a monthly income of less than 25,000 rupees, and 50.8% of parents had a source of health information from parents, relatives, and friends (►Table 1)

Knowledge Score of Parents Regarding Home Management of Minor Ailments

►Fig. 1 depicts that 52(80%) of parents had a good knowledge, 13(20%) had moderate level of knowledge, and none had poor knowledge level.

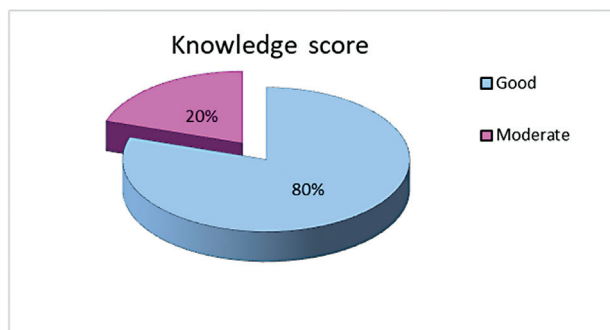


Fig. 1 Pie chart depicts knowledge score of parents regarding home management of minor ailments.

Practice of Parents Regarding Home Management of Minor Ailments

►Table 2 shows the frequency and percentage distribution of practice scores of parents regarding home management of minor ailments. About 1.5% of parents said their child did not

Table 1 Frequency and percentage distribution of demographic proforma, n = 65

Sl. no.	Demographic variables	Category	Frequency (percentage)	
1	Age	a. 18–25	12	(18.5)
		b. 26–35	30	(46.2)
		c. 36–45	18	(27.7)
		d. >45	5	(7.7)
2	Gender	a. Male	9	(13.8)
		b. Female	56	(86.2)
3	Education status	a. No formal education	1	(1.5)
		b. Primary	19	(29.2)
		c. High school	18	(27.7)
		d. PUC	17	(26.2)
		e. Graduate	7	(10.8)
		f. Postgraduate and above	3	(4.6)
4	Occupation	a. Private employee	5	(7.7)
		b. Government employee	1	(1.5)
		c. Employee in healthcare setting	2	(3.1)
		d. Daily wages	19	(29.2)
		e. Unemployed	38	(58.5)
5	Type of family	a. Nuclear family	34	(52.3)
		b. Joint family	31	(47.7)
6	Religion	a. Hindu	27	(41.5)
		b. Muslim	35	(53.8)
		c. Christian	3	(4.6)
7	Number of children	a. 1	8	(12.3)
		b. 2	34	(52.3)
		c. 3	15	(23.1)
		d. >3	8	(12.3)
8	Monthly income	a. <25000	51	(78.5)
		b. 25000–30000	10	(15.4)
		c. 30000–35000	1	(1.5)
		d. >35000	3	(4.6)
9	Source of health information	a. No source of health information	9	(13.8)
		b. Parents, relatives, friends	33	(50.8)
		c. Health workers	12	(18.5)
		d. Mass media	11	(16.9)

Table 2 Frequency and percentage distribution of practice score, $n = 65$

Sl. no.	Minor ailments	Practice score			
		Good practice	Moderate practice	Poor practice	Not encountered
		f (%)	f (%)	f (%)	f (%)
1	Fever	28 (43.1)	36 (55.4)	–	1 (1.5)
2	URTI (cough, cold, sore throat)	61 (93.8)	1 (1.5)	1 (1.5)	2 (3.1)
3	Diarrhea	28 (43.1)	31 (37.7)	2 (3.1)	4 (6.2)
4	Abdomen colic	27 (41.5)	–	31 (47.7)	7 (10.8)
5	Vomiting	37 (56.9)	23 (35.4)	2 (3.1)	3 (4.6)
6	Skin abrasions/superficial cut wounds	60 (92.3)	1 (1.5)	–	4 (6.2)

Abbreviation: URTI, upper respiratory tract infection.

have a fever episode, 3.1% said their child did not have a URTI, 6.2% said their child did not have diarrhea and superficial wounds/abrasions, 10.8% said their child did not have abdominal colic, and 4.6% said their child did not have vomiting. Thirty-six (55.4%) parents had moderate practice levels and 28(43.1%) had good practice scores regarding home management of fever; 61(93.8%) had a good practice and 1 (1.5%) had moderate and poor practice at-home management of URTI; 28 (43.1%) had a good practice and 31 (37.7%) had moderate and 2(3.1%) had poor practice regarding home management of diarrhea; 27 (41.5%) had a good practice and 31(47.7%) had poor practice score on the management of abdomen colic at home; 37 (56.9%) had good practice, 23 (35.4%) had moderate practice, and 2 (3.1%) had poor practice on home management of vomiting; almost 60 (92.3%) had a good practice and 1 (1.5%) had moderate practice on management of skin abrasions/superficial wounds at home

Practice Regarding Home Management of Fever

Data in ►**Table 3** shows that the majority 46 (70.8%) had given and 18 (27.7%) had not given more fluid to reduce fever, 57 (87.7%) parents performed cold compression by dipping the cotton cloth in lukewarm water, while 7 (10.8%) did not perform cold compression, during an episode of fever 62 (95.4%) monitored temperature regularly, whereas as 2 (3.1%) did not monitor the temperature regularly, 35 (53.8%) of parents kept their child warm with a blanket, cotton cloths, and 29 (44.6%) did not cover their child with a blanket, cotton cloth to make their child warm. And about 1.5% of parents said their child did not have a fever episode

Practice Regarding Home Management of Cough, Cold, and Sore Throat

Data in ►**Table 4** shows that 59 (90.8%) of parents kept their child away from smoke and dust, 4 (6.2%) did keep their children away from smoke and dust, majority of parents 58

(89.2%) provided steam inhalation, while 5 (7.7%) did not provide steam inhalation, 61 (93.8%) did not provide fried fish, and 2 (3.1%) provided fried fish; 61 (93.8%) provided hot water to resolve cough and 2 (3.1%) did not give hot water to resolve cough; 62 (95.4%) of parents made their child gargle with salt water, 1 (1.5%) did not make their child gargle with salt water; and 3.1% said their child did not had episode of cough, cold, and sore throat.

Practice Regarding Home Management of Diarrhea (►**Table 5**)

The practice of parents regarding home management of diarrhea shows that 52 (80%) parents provide plenty of oral fluid and 9 (13.8%) did not give plenty of oral fluid; 53 (81.5%) wash their hands before preparing food and 8 (12.3%) did not wash their hands before preparing food; 41 (63.1%) monitored number of episodes of diarrhea, whereas 20 (30.8%) did not monitor a number of episodes of diarrhea; 33 (50.8%) gave yogurt, while 28 (43.1%) did not give yogurt; 34 (52.3%) used to breastfeed and 27 (41.5%) did not breast-feed their child during an episode of diarrhea; and 6.2% said their child did not have an episode of diarrhea

Practice Regarding Home Management of Abdomen Colic and Vomiting (►**Table 6**)

The majority of parents 31 (47.7%) placed a hot water bag/heating pad on the child's stomach in order to reduce abdomen colic and 27 (41.5%) did not place a hot water bag/heating pad on the child's stomach; 10.8% said their child did not have abdominal colic. The practice of parents in managing vomiting at home shows that 50 (76.9%) parents prepared oral rehydration solutions (ORS) and gave it to the child and 12 (18.5%) did not give ORS; the majority of parents 47 (72.3%) provided dairy products and 15 (23.1%) did not give dairy product when the child had vomiting; 4.6% said their child did not have vomiting

Table 3 Frequency and percentage distribution of practice of parents regarding home management of fever, $n = 65$

Sl. no.	Statement	Yes	No	Not recommended
		f (%)	f (%)	f (%)
1	I give fluid to my child to reduce fever	46 (70.8)	18 (27.7)	1 (1.5)
2	I perform cold compression by dipping the cotton cloth in lukewarm water	57 (87.7)	7 (10.8)	1 (1.5)
3	During episodes of fever, I monitor temperature regularly	62 (95.4)	2 (3.1)	1 (1.5)
4	During the episodes of fever, I lower the room temperature in order to reduce the body temperature	18 (27.7)	46 (70.8)	1 (1.5)
5	I keep my child warm during the episode of cold with blankets, cotton clothes	35 (53.8)	29 (44.6)	1 (1.5)

Table 4 Frequency and percentage distribution of practice of parents regarding home management of cough, cold and sore throat, $n = 65$

Sl. no.	Statement	Yes	No	Not recommended
		f (%)	f (%)	f (%)
6	I keep the child away from smoke and dust when my child has cough and cold	59 (90.8)	4 (6.2)	2 (3.1)
7	I provide steam inhalation with hot water during cough and cold	58 (89.2)	5 (7.7)	2 (3.1)
8	I provide fried fish to reduce cough	2 (3.1)	61 (93.8)	2 (3.1)
9	I provide hot water to resolve cough and sore Throat	61 (93.8)	2 (3.1)	2 (3.1)
10	I make my child to gargle with salt water during sore throat	62 (95.4)	1 (1.5)	2 (3.1)

Table 5 Frequency and percentage distribution of practice of parents regarding home management of diarrhea, $n = 65$

Sl. no.	Statement	Yes	No	Not encountered
		f (%)	f (%)	f (%)
11	I provide plenty of oral fluid during diarrhea	52 (80.0)	9 (13.8)	4 (6.2)
12	I wash my hand before preparing food during diarrhea	53 (81.5)	8 (12.3)	4 (6.2)
13	I monitor number of episodes of diarrhea in 1 day	41 (63.1)	20 (30.8)	4 (6.2)
14	I provide yogurt for diarrhea	33 (50.8)	28 (43.1)	4 (6.2)
15	I used to/ breastfeed my child during the episodes of diarrhea	34 (52.3)	27 (41.5)	4 (6.2)

Table 6 Frequency and percentage distribution of practice of parents regarding home management of abdomen colic and vomiting, $n = 65$

Sl. no.	Statement	Yes	No	Not encountered
		f (%)	f (%)	f (%)
16	I place hot water bag or heating pad on child's stomach to relieve pain	27 (41.5)	31 (47.7)	7 (10.8)
17	I prepare ORS and give to the child when my child has vomiting	50 (76.9)	12 (18.5)	3 (4.6)
18	I provide dairy products when my child has vomiting	15 (23.1)	47 (72.3)	3 (4.6)

Abbreviation: ORS, oral rehydration solutions.

Table 7 Frequency and percentage distribution of practice of parents regarding home management of superficial wound/ superficial abrasions, $n = 65$

Sl. no.	Statement	Yes	No	Not encountered
		f (%)	f (%)	f (%)
19	I apply direct pressure for 5 to 10 min to stop bleeding from wound	51 (78.5)	10 (15.4)	4 (6.2)
20	In case of cuts, first I clean the wound, then apply ointment	58 (89.2)	3 (4.6)	4 (6.2)
21	I monitor the site of cut daily and apply antiseptic until wound heals	58 (89.2)	3 (4.6)	4 (6.2)

Practice Regarding Home Management of Superficial Wound/Superficial Abrasions (► Table 7)

Parent's practice in managing superficial wound/ superficial abrasions at home showed that 51 (78.5%) parents applied direct pressure for 5 to 10 minutes to stop bleeding from the wound and 10 (15.4%) parents did not apply any direct pressure to control bleeding, and majority of parents 52 (89.2%) applied ointment after cleaning the wound, whereas 3 (4.6%) did not clean wound as well as did not apply ointment on cuts, 58 (89.2) monitored the site wound and applied antiseptic until the wound got cured and 3 (4.6%) did not monitor wound as well as did not apply ointment until the wound got cured, and 6.2% said their child did not have an episode of superficial wounds/abrasions.

Discussion

Minor ailments most commonly affect children under 5 years of age. Parents of children under 5 should have sufficient knowledge regarding managing these minor ailments at home. If these problems are managed at home, further complications can be minimized. Parents are using different methods of practice in order to manage the problems of their young ones.

This study revealed that the majority (46.2%) of the samples were of 25–36 years. Most (86.2%) of the samples were female. About 29.2% of the samples had primary school level education qualifications, and about 52.3% of them belonged to nuclear families, while 53.8% of the samples

were Hindus. Around 52.3% of the samples had more than 2 children. Most (78.5%) samples had a monthly income of less than 25,000 rupees, and 50.8% of parents had a source of health information from parents, relatives, and friends.

A similar study done by Yadav and Kumari showed that most of the participants were between the ages of 20 and 25 (60.00%, on average). About 48.33% of the samples' fathers had a grade level of 6th to 12th, according to data on fathers' education. About 48.33% of the sample mothers had a degree from the sixth to the eighth grade, according to data on their schooling. In terms of the father's profession, 51.66% of respondents were doing private jobs. The mother's occupation indicates that the majority of the samples—95%—were made up of families with homemakers. Sixty percent of them were members of combined families. According to the samples' data on family income, 40% of the total samples had incomes of between 5,001 and 10,000 rupees. About 48.34% of the samples had just one child.⁶

In this study, majority of parents had a good knowledge level and none had poor knowledge level.

A similar study was done by Nair and Kumar to assess the knowledge of mothers regarding home management of minor ailments among under-5 children in selected areas of Mysuru district. The study result showed that the majority of moms (25.6%) had a basic understanding of how to treat minor illnesses at home. About 14.92 was the average knowledge score.⁷

A similar study done by Swapna et al on the knowledge of common minor ailments among mothers of under-5 children

showed that the majority of respondents (65%) had an average knowledge level of treating minor ailments, while 22% had below average knowledge and 13% had above average knowledge. This is based on the frequency and percentage distribution of mothers of children under the age of 5.⁸

Our study showed that parents of under-5 children had good practice regarding home management of minor ailments. This was supported by a study conducted by Abu-Baker et al on mothers' knowledge and practices of managing minor illnesses of children under 5 years. The finding of the study showed that the average number of questions on fever management that was properly answered was 8.6 (standard deviation [SD]: 14.7). The mean score for URTI management was 4.9 (SD: 14.4), and 6.4 (SD: 14.2) for diarrhea.⁹

A similar study was done by Desta et al on knowledge, practice, and associated factors of home-based management of diarrhea among caregivers of children. According to this study, 231 caregivers (62.4%) had poor practices with the home management of diarrhea, while 139 (37.6%) had good practices (95% confidence interval = 32.7, 43.2).¹⁰

Nursing Implications

The nursing implications of this study in nursing education are that parent involvement must be motivated in improved and innovative ways. Parents' understanding of how to treat minor diseases in children under the age of 5 should be improved via health education and training programs. The nurse administrator should be interested in delivering information on minor illnesses that affect children under the age of 5. Parental health education should be planned and organized by the nurse administrator. She should plan ahead to ensure that there is enough staff, money, and material available to disseminate health information. Research should focus on improving the knowledge and practices of parents regarding health aspects. Research should also focus on the care of minor ailments in under-5 children to enable them to go through treatment with the minimum of discomfort and a better quality of life. Research should be done on the preparation of innovative methods of caring for minor ailments in under-5 children.

Limitation

This study has the limitation that the information gathered from parents about how to manage minor illnesses at home was self-reported, which may or may not reflect what they actually practice.

Since the sample size was small and the study was in a single setting, generalization is not possible.

Recommendation

On the basis of the results of this study, the author has made the following recommendations for a future study: A study can be done to know whether coronavirus disease 2019 situations have an impact on the home management of minor ailments. Study can be done to find knowledge and practice on another minor ailment

Conclusion

The results of this study showed that parents of under-5 children had good knowledge and practice regarding home management of minor ailments. It also found an association between total knowledge score with education status of the parents and between the education status and occupation with practice of URTI as well as a significant association between source of health information with practice score of fever.

Conflict of Interest

None declared.

Acknowledgments

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