

Assess the Knowledge Regarding Hand Foot Mouth Disease among Mothers of under-five Children in Selected Community

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ABSTRACT

AIM: The present study aims to assess the knowledge regarding hand foot mouth disease among mothers of under-five children in selected community. **METHODS AND MATERIALS:** Quantitative approach with descriptive research design was adopted for the present study. A total 60 mothers were recruited as samples by using purposive sampling technique. The current study was conducted in Chinnalarpuram community area. The level of knowledge on hand foot mouth disease among mothers was assessed by using structured knowledge questionnaire. **RESULTS:** The present study revealed that 34 (56.7%) of the mothers had inadequate knowledge, 07 (11.6%) had moderate knowledge and 19(31.7%) had adequate knowledge. The demographic variable education showed significant association with the level of knowledge on hand foot mouth disease at $p < 0.01$ **CONCLUSION:** The present study assessed the level of knowledge on hand foot mouth disease among mothers of under-five children and though education showed significant association, other demographic variables had no significant association and the majority of mothers had inadequate knowledge.

KEYWORDS: Knowledge, hand foot mouth disease, mothers of under-five children

INTRODUCTION

Hand, foot, and mouth disease (HFMD) is a common viral illness usually affecting infants and children and is extremely uncommon in adults; however, still a possibility. The infection usually involves the hands, feet, mouth, and sometimes, even the genitals and buttocks[1]. Hand, foot and mouth disease (HFMD) is a human syndrome caused by intestinal viruses of the Picornaviridae family. The most common strains causing HFMD are Coxsackie A virus and Enterovirus 71 (EV71). Individual cases and outbreaks of HFMD occur worldwide. In temperate climates, cases occur more often in summer and early autumn. Since 1997, outbreaks of HFMD caused by Enterovirus 71 have been reported in Asia and Australia. An outbreak of papulovesicular lesions on skin and oral mucosa of children occurred in Calicut, India from October to November 2003 affecting 81 children and was investigated by NICD team. All children recovered within 1-2 weeks. In 2006, after an outbreak of Chikungunya in southern and some western parts of India, cases of HFMD were also

reported [2]. All children have the right to have a protective environment. Today, more than one billion under-five children in the world are exposed to the problem of under-nourishment. Among them, from the year 2012 to 2016, more than one million HFMD (hand, mouth, and foot disease) cases have been reported in India. The northern region of India had been reported as the highest incident rate area at 31.05 per 100,000 population followed by the central region 24.55 per 100,000 population[3]. It spreads from person to person usually through unwashed hands, contaminated surfaces, or direct contact with the mucus, saliva, or feces of the infected person[4]. It usually occurs in summer affecting children below ten years of age. The usual incubation period is 3-7 days. The clinical feature is characteristic and classically consists of a combination of exanthema and enanthem. The clinical symptoms manifest themselves with low-grade fever, cough, malaise, and a sore mouth and throat. Within 1 and 2 days after the onset of fever, painful sores may appear in the mouth

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or throat. A rash may become evident on the hands, feet, mouth, and tongue, inside of the cheeks, buttocks, knees, and elbows. Oral lesions appear as vesicles, which rapidly ulcerate producing multiple small superficial ulcers with erythematous halos [5]. Child care settings are the most common places for HFMD to be contracted because of the bathroom training, diaper changes, and that children often put their hands into their mouths. Children who do not attend a preschool or kindergarten were found to be more susceptible to the disease. Preventive measures include avoiding direct contact with infected individuals (including keeping infected children home from school), proper cleaning of shared utensils, disinfecting contaminated surfaces, and proper hand hygiene. Protective habits include hand washing and disinfecting surfaces in play areas. Breast-feeding has also shown to decrease rates [6]. Medications are usually not needed as hand, foot, and mouth disease is a viral disease that typically resolves on its own. Currently, there is no specific curative treatment for hand, foot and mouth disease. Disease management typically focuses on achieving symptomatic relief. Pain from the sores may be eased with the use of analgesic medications. Fever can be treated by keeping the child hydrated and using antipyretics. In India, outbreaks of HFMD have been reported from various places, including Kerala, Odisha, Himachal Pradesh and Uttarakhand [7]. Parents play an important role as health promoters in their children's lives. Moreover, parents' knowledge and perception are important determinants towards Hand foot mouth disease [8]. There are no vaccine available for hand foot mouth disease and knowledge regarding it will help parents to identify the disease in their children at the earliest thereby preventing complications. There are limited studies related to knowledge assessment regarding Hand foot mouth disease among mothers of under-five children. Hence the researcher took up the present study to assess the knowledge regarding Hand foot mouth disease among mothers of under-five children in selected community.

MATERIAL AND METHODS

Study Design: Quantitative approach with descriptive research design. **Study setting:** After obtaining ethical clearance from the Institutional Ethical Committee of Saveetha institute of Medical and Technical Science and formal permission was obtained from the Panchayat president of the community locality to conduct the present study. **Study Participants:** Mothers of under-five children, who were able to understand, speak, read and write

Tamil and English, who were who are available at the time of data collection were included in the study. Mothers who were not willing to participate in the study were excluded. **Sampling Technique:** A total of 60 samples by purposive sampling technique based on the inclusion criteria. **Informed Consent:** The purpose of the study was explained by the investigator to each study participants and a written informed consent was obtained from them. **Assessment:** The demographic data and the knowledge regarding hand foot mouth disease were collected from the samples by using structured knowledge questionnaire. The data was analyzed by using descriptive and inferential statistics.

RESULTS AND DISCUSSION

SECTION A: DESCRIPTION OF THE DEMOGRAPHIC VARIABLES OF MOTHERS OF UNDER-FIVE CHILDREN

The result revealed maximum of mothers 25 (41.6%) were in the age group 41-50 years, With respect to Education 35 (58.3%) had School education, In regard to Religion 35 (58.3%) were Christians, Maximum of mothers 31 (51.7%) were government employees, In respect to children 40 (66.7%) were having child at 3-5 years and 29 (48.3%) of them had an income of 20,001-30,000 rupees per month.

SECTION B: TO ASSESS THE LEVEL OF KNOWLEDGE ON HAND FOOT MOUTH DIEASE AMONG MOTHERS OF UNDER FIVE CHILDREN

Table 1: frequency and percentage distribution of level of knowledge on hand foot mouth disease.

Level of knowledge	Inadequate		Moderate		Adequate	
	NO	%	NO	%	NO	%
	34	56.7	7	11.6	19	31.7

The above table depicts that 34 (56.7%) of mothers had inadequate knowledge on hand foot mouth disease, (07)11.6% of mothers had moderate knowledge and 19 (31.7%) of mothers had adequate knowledge.

Sherinnithyaet., al (2020) conducted a study to assess the knowledge regarding hand foot mouth disease among the mothers of under-five children and staff nurses. A descriptive comparative research design through purposive sampling technique was adopted with 60 samples. The result revealed that among mothers under-five children, 15 (50%) had inadequate knowledge on HMFMD, 12 (40%) had moderate knowledge and 3 (10%) had adequate knowledge.[3]

Table 2: MEAN AND STANDARD DEVIATION SCORES WITH THE LEVEL OF KNOWLEDGE ON HAND FOOT MOUTH DISEASE AMONG MOTHERS OF UNDER FIVE CHILDREN.

N = 60

Awareness	Mean
Minimum Score	2.0
Maximum Score	8.0
Mean	17.54
Standard Deviation	6.79

The above table shows that minimum score is 2.0, maximum score is 8.0, mean is 17.54, and standard deviation is 6.79 for knowledge on hand foot mouth disease.

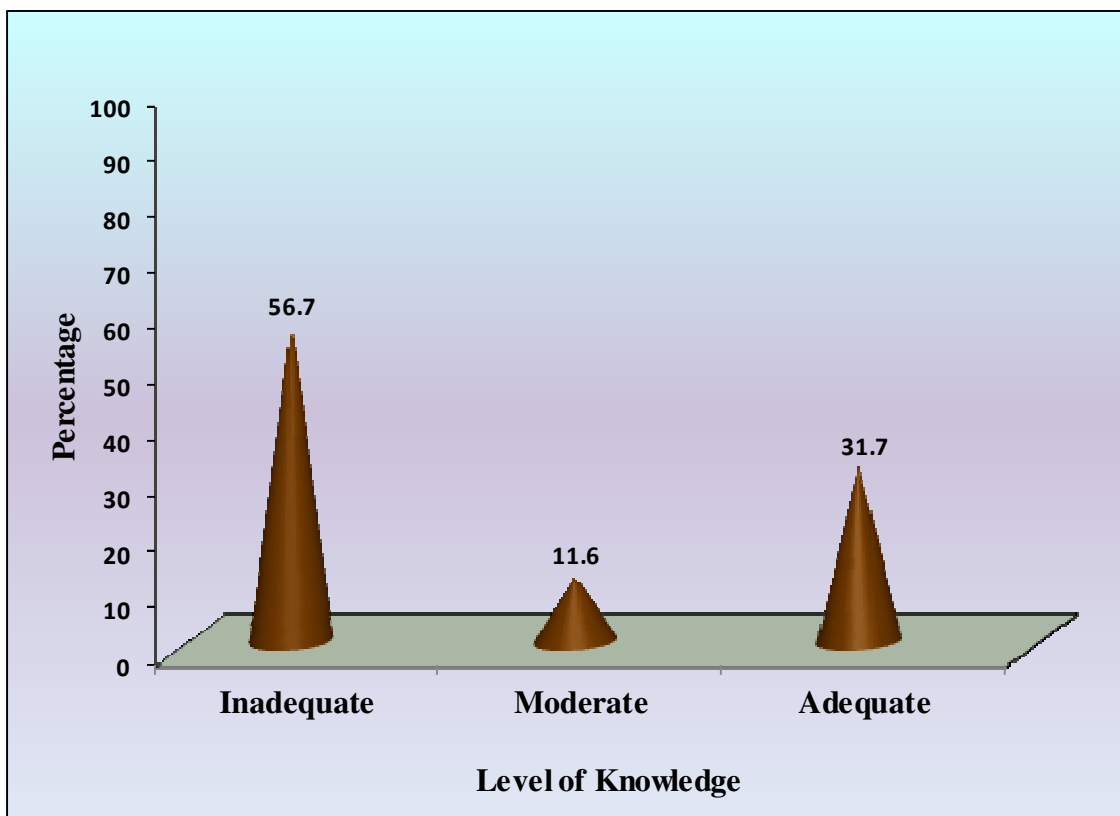


Fig:1 Cone diagram representing the level of knowledge in Mothers of under-five children.

SECTION C: ASSOCIATION BETWEEN THE LEVEL OF KNOWLEDGE ON HAND FOOT MOUTH DISEASE AMONG MOTHERS OF UNDERFIVE CHILDREN WITH SELECTED DEMOGRAPHIC VARIABLES.

The demographic variable education shows significant association with level of knowledge on hand foot mouth disease. There was no significant association of other variables such as age, religion, occupation and income with the level of knowledge. (Mansor Nik, Ahamed A 2021) The above finding is supported by a survey which was conducted to assess current knowledge and prevention practices among parents and caregivers in Bandar Puncak Alam, Selangor. A cross-sectional, questionnaire-based study was conducted on 345 residences of Bandar Puncak Alam, Selangor. It comprised of 77.4% (n=267) parents and 22.6% (n=78) caregivers from different daycares, kindergartens and preschools. The

study showed that the majority, 87.2% (n=301) of Bandar Puncak Alam residents, Selangor have a moderate level of knowledge on HFMD. No significant difference in knowledge was found between parents and caregivers (p = 0.553). Age, occupation, level of education, and income of respondents influenced the HFMD knowledge level (p < 0.05). [9]

CONCLUSION:

The present study assessed the level of knowledge on hand foot mouth disease among mothers of under-five children. Maximum of the mothers had inadequate knowledge. Hence there is a necessity to educate the mothers of the disease and its prevention. The study can be replicated in a larger scale to generalize the findings.

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CONFLICT OF INTEREST:

Authors declare no conflict of interest.

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