A study about Knowledge, Attitude and Practice (KAP) regarding worm infestation among the caregivers of children aged between 5 – 12 years in a tertiary care hospital

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ABSTRACT
Worm infection is a public health problem, especially in developing and under-developed countries as it has a negative impact on the child's development. Proper sanitation and personnel hygiene have to be emphasized and monitored to overcome the nutritional deprivation in children. The study is done to evaluate the knowledge and attitude about worm infestation and to assess the deworming practices employed among the caregivers of children aged between 5 – 12 years attending a tertiary care hospital. A cross-sectional descriptive study was conducted among 206 caregivers of pediatric age group after obtaining proper informed consent. The KAP parameters were assessed using a pretested structured questionnaire, and the results were analyzed. Out of 206 caregivers, 61% were mothers, 37% were fathers. Their mean age was 30 years. 41% belong to class III socioeconomic status. 23% were reported to play in the mud, 17% nail-biting and 6% keeping objects in mouth. 12% had open-air defecation practice, which is quite alarming in a developing country. 67% were found to have the knowledge and 33% lacked the knowledge about worm infestation. Knowledge was directly proportional to the socioeconomic class. 88% were aware that worm infestation would cause clinical manifestations. 85% preferred allopathy medicines, while 15% preferred homemade remedy. 68% didn't practice any prophylactic measures, where in 21% of the caregivers dewormed their kid once in 6 months and 11% once a year. The study provides information that most of the caregivers had a good knowledge regarding deworming but failed in practicing necessary measures to control and prevent it. Health education, frequent monitoring, and conducting interventional programs among parents and caregivers would be vital so that the prevalence of the disease can be minimized.

1 INTRODUCTION
Worm infestation is one of the most common infections in children, especially of low socioeconomic status. Soil-transmitted helminths are transmitted by eggs excreted in human faeces, which contaminate the soil in areas that lack adequate sanitation. People are infected through ingestion of infective eggs or larvae that contaminate food, hands or utensils, or by penetration of the skin by infective larvae that contaminate the soil. Low socioe-
economic status, poor sanitary methods, illiteracy, overcrowding, poverty are the major cause for worm infestation in developing countries (Nwosu and C., 1981). Signs and symptoms of worm infestation would be abdominal pain, fever, diarrhea, dysentery and vomiting. Intestinal obstruction and anemia are associated with roundworm and hookworm, respectively (Casapia, 2006). This infection has a negative impact on the child's growth and development by causing nutritional deprivation. Hence we have done this study to evaluate the knowledge and attitude about worm infestation and to assess the de-worming practices employed among the caregivers of children aged between 5 – 12 years.

2 MATERIALS AND METHODS

After obtaining clearance from the Scientific Review Board and the Institutional Ethics Committee, the study was carried forward. An information sheet with pertinent information was given to all the participants invited to participate in the study. Written informed consent was obtained from all parents of all children aged 5 – 12 years attending the outpatient department and inpatients of the pediatric ward. The study was carried out on 206 participants. They were given a pretested structured questionnaire and asked to fill up the questions. The responses were collected and analyzed using appropriate statistical tools for parametric and non-parametric data with the help of SPSS for Windows version 22 software.

3 RESULTS AND DISCUSSION

In our study, out of 206 caregivers of children aged between 5-12 years, 61% (126) were mothers, 37% (77) were fathers (Figure 1). Their mean age was 30 years. None of the caregivers in our study was illiterate. Majority 56% went to high school, 19% were graduates, 21% went to middle school. In our study, 41% belong to class III according to the modified Kuppusamy scale (Figure 2). In the present study, 23% were reported to play in the mud, followed by nail-biting (17%), keeping objects in the mouth (6%). Rest did not have any such personal habits. 12% had open-air defecation practice, which is quite alarming in a developing country.

Knowledge

In the present study, 67% were found to have the knowledge, and 33% lacked in knowledge about worm infestation (Figure 3). Association between knowledge and socioeconomic class is found to be statistically significant, which means their level of knowledge is directly proportional to the socioeconomic class. A study by Mwale K demonstrated the difference in knowledge of deworming with the level of education and socioeconomic status (Mwale and Siziya, 2015). Majority of the Population who had knowledge had gained it from their friend, relatives and the remaining through other sources.

Attitude

According to the study, 12% considered worm infestation is normal, but 88% were aware that it would cause manifestations (Figure 4). Among those who considered worm infestation abnormal, 85% preferred allopathy medicines while 15% preferred
homemade remedies. A study by Amein NM et al. showed that home remedies are practiced by caretakers and are found to be useful.

Figure 4: Distribution of population considered worm infestation normal

Practice

During our survey, we encountered 30% children had suffered worm infestation in the recent 6 months. Among them, the majority used tablets to cure the disease. 68% did not practice any prophylactic measure, where in 21% of the caregivers dewormed their kid once in 6 months and 11% once a year (Figure 5) which was in contrast to a study by Tripura A that showed 65% of caretakers dewormed their children regularly (Tripura et al., 2013). A study by Fatima SR et al. showed the deworming was done regularly by literates than illiterates. All the 206 people included in our study had taught their kids about safe personal hygiene practices like washing hands after defecation, washing hands before eating, prevent them from playing in the mud. Hand washing is the most vital practice which intervenes with the faecal-oral transmission of diseases and can act as a barrier to interrupt the transmission. (Curtis and S., 2003)

Figure 5: Distribution of population showing the frequency of deworming practices

4 CONCLUSION

The study provides the information that inspite of having knowledge regarding deworming but most of the caregivers failed in practicing deworming measures to control and prevent it. Caregivers of lower socioeconomic status did not have knowledge regarding the prophylactic measures available. Open-air defecation is still being practiced by a section in our study group. Health education, frequent monitoring, and conducting interventional programs among parents and caregivers would be vital so that the prevalence of the disease can be minimized as worm infestation is a public health problem.

REFERENCES


