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A Survey on Amoebiasis among Undergraduate Dental Students

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Abstract: ***Aim: The aim of this study is to assess and evaluate the knowledge on amoebiasis among undergraduate Dental students. Objective: This study is to create awareness about the etiology, signs &symptoms, and prevention of amoebiasis among undergraduate dental students. Background: Amoebiasis, also known as amebiasis or entamoebiasis, is an infection caused by any of the amoebas of the Entamoeba group. Symptoms are most common upon infection by Entamoeba histolytica. Amoebiasis can present with no, mild, or severe symptoms. Symptoms may include abdominal pain, mild diarrhoea, bloody diarrhoea or severe colitis with tissue death and perforation. This last complication may cause peritonitis. People affected may develop anaemia due to loss of blood. Prevention of amoebiasis is by separating food and water from faeces and by proper sanitation measures. There is no vaccine. There are two treatment options depending on the location of the infection. Amoebiasis in tissues is treated with either metronidazole, tinidazole, nitazoxanide, dehydroemetine or chloroquine. Result: On analysing the above data, 83.9% of the students were aware about amoebiasis and 41.6% were unaware about the investigations done. Conclusion: From the obtained data we can look over that most of the students were aware about causes, signs and symptoms, prevention and treatment, but their knowledge regarding their investigation is comparatively less.***

Keywords: Amoebiasis, Entamoeba histolytica, dysentery, Awareness

1. Introduction

Amoebiasis, also known amoebic dysentery, is an infection caused by any of the amoebas of the Entamoeba group. Symptoms are most common upon infection by Entamoeba histolytica. Amoebiasis is widespread in its distribution, occurring in all parts of the world. The invasive amoebiasis is more prevalent in areas such as West and South-East Africa, China, etc and the India subcontinent[1]. Unhealthy hygiene practices, Poor environmental sanitation, overcrowding are some of the causative factors that causes high risk and prevalence of E. histolytica in these regions[2]. The existence of E. histolytica infections is associated with unhealthy diet, poor hygiene, poor environmental hygiene, and poor health service providers without proper supply of drugs, insufficient and poor awareness of the transmission mechanisms and life-cycle patterns of these parasites[3, 4, 5].

Amoebiasis is classified into intestinal and extra-intestinal types. The subtypes of the intestinal amoebiasis isdysenteric and non-dysenteric amoebic colitis. The extra-intestinal amoebiasis is one of the types that involve the liver, brain, spleen and other organs of the human body. Abdominal discomfort, weakness, malaise, constipation are some of theClinical presentationof the intestinal infectionthat may alternate with diarrhoea, dysentery with the passage of exudates, blood and mucus as well as colicky abdominal pain. Fever, rigors and polymorphonuclear leukocytes are some of the Systemic signs of infection whereas liver abscess is the infection through the intra-hepatic portal vessels (Harold 1975, Haque 1995 Huston, Haque Williams, Peter, 1999). The diagnosis is done by finding or identifying the trophozoites and cysts in the stool, biopsy, ultrasonic CT, MRI, serological examination and aspirantin case of extra-intestinal amoebiasis[6].

2. Methods and Materials

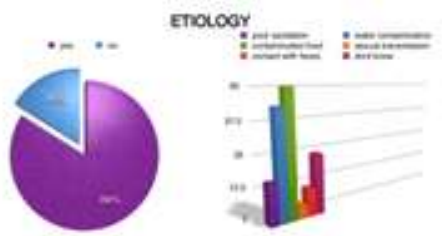
A cross sectional survey was conducted to evaluate the knowledge about Amoebiasis among the undergraduate dental students studying in Saveetha Dental College. A questionnaire was distributed to the UG students in order to evaluate their knowledge and awareness regarding the Amoebiasis. The two variables were constructed to measure knowledge of Amoebiasis from these responses. The responses were analysed in a descriptive manner.

3. Result

Table 1

	Etiology	Signs and Symptoms	Investigation	Treatment	Prevention
Aware	83.9	89.3	34.9	77.2	84.6
Unaware	16.1	10.7	65.1	22.8	15.4

On analysing the above data [Table 1], 83.9% of the students were about the causes for Amoebiasis, 89.3% of them were aware about signs about Amoebiasis, 34.9% were aware about the investigations and 77.2% of the UG students were aware about the treatment and 84.6% of them were aware about the preventive methods.



Graph 1

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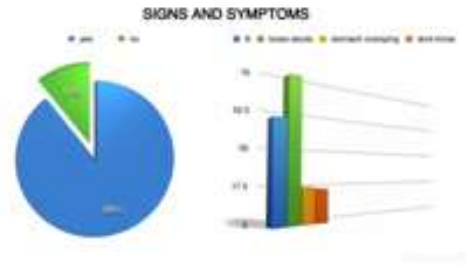
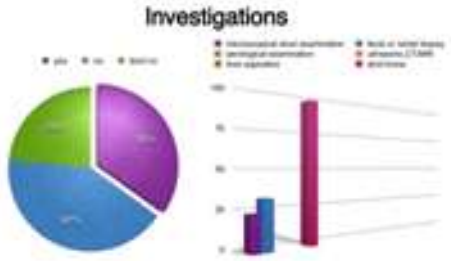
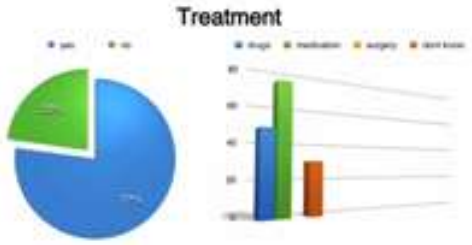


Graph 2



Graph 3



Graph 4

4. Discussion

Knowledge and awareness bout amoebiasis was assessed among hundred dental undergraduate students. This study represents the baseline information on the knowledge and awareness about the amoebiasis. Overall, knowledge of the participants about amoebiasis is well known. However, their knowledge on investigations [Graph 3] was less. Most of therespondent indicated that they had heard of Amoebiasis and they were able to provide an answer when asked what they knew, from the table 1, 89.3% of the students were aware about Amoebiasis. The most common response, given by the respondents, described symptoms (such as ill or loose stools) that are consistent with clinically established consensus. Other respondents mentioned stomach cramping.

In this study, most of the people opted cleaning of the fruits and vegetables as their prior treatment even though avoiding unpasteurised and street foods play an important role in spreading of the infection. A study has reported that combination of stool O&P examination and serological testing and, where indicated, by colonoscopy and biopsy was conducted. When compared to other techniques serological testing remains an important tool. However, about 65.1% of the participants were unaware about the investigations done for amoebiasis.

5. Conclusion

Our findings point to a critical need to educate the students and public about the symptoms of Amoebiasis, its causes, and the treatments that have proven effective, although media and educational efforts should make a special effort to reach populations. The questions analysed here pertain to general awareness and beliefs about Amoebiasis, rather than about the conditions under which respondents would recognise symptoms of Amoebiasis and the related features.This study concluded knowledge and awareness among the studied population is inadequate. Hence, educational program needs to be initiated to address this concern.

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