

# Evaluation of Acute Diarrhoeal Disease among Females Age 18-23 Years: A Study from Tamil Nadu, India

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**Abstract:- Acute diarrhea is a sickness for which a specific etiologic agent is frequently unable to be identified clinically. Evolution covers a broad range, from self-limited illness to demise. The causes of acute diarrhea, which is clinically defined as the release of three or more loose or watery stools in a day or a distinct drop in consistency and an increase in frequency depending on the individual, are discussed in this chapter along with their viral and bacterial causes. Female participants in the age range of 18 to 25 are being studied at the Sree Ramakrishna Medical College of Naturopathy and Yogic Sciences and Hospital in Kulasekharam, Tamil Nadu, India. Verbal consent was gained when the study's goal was explained. Thirty individuals participated in this study. There are thirty questions on the questionnaire. Unwilling or uncooperative female participants were excluded from the study at that point. The study concluded that women should know more about the need to eat a balanced diet, the risks associated with junk food, the consequences of gut dysbiosis, and how to prevent consuming contaminated food. Future care should focus on these areas to enhance young females' overall wellness and health.**

## I. INTRODUCTION

An expanding list of known bacterial, parasite, and viral pathogens linked to intestinal tract infections can seriously impair intestinal function, either with or without the development of severe diarrhea. A single etiologic agent is often not able to separate the illness known as acute diarrhea clinically. From self-limited illness to death, there is a vast spectrum of evolution. Dehydration is the leading cause of death, and severe diarrhea is most common in underdeveloped nations' pediatric populations.

The clinical definition of acute diarrhea is defined as the release of three or more loose or watery stools in a 24-hour period, or a clear drop in consistency and an increase in frequency based on an individual baseline that is shorter than two weeks. This chapter looks at the viral and bacterial causes of acute diarrhea. Diarrhea that persists for more than 14 days is categorized as persistent; diarrhea that lasts for one month or longer is typically referred to as chronic.

## II. PATHOPHYSIOLOGY

When there is diarrhea, the stool has more water in it, which could be a result of the bowel moving more actively or of poor water absorption. Stool volume per day can surpass two liters in cases of severe infectious diarrhea. Severe diarrhea can have potentially fatal implications such as potassium loss and dehydration. The small intestine and eventually the colon absorb the majority of water. About 8 liters of fluid remain by the time they reach the ileocecal valve, indicating an efficient absorption of water. It is usually only a few milliliters of fluid (formed feces) that remain by the time the leftover fluid reaches the anus. A digestible solute, like lactose, can cause osmotic diarrhea if it is not well absorbed and causes the gut lumen to retain water. Osmotic diarrhea and malabsorption can be brought on by toxins or infections that directly harm the intestinal epithelial cells. Water is actively secreted into the gut lumen by toxins, which causes secretory diarrhea. Intestinal inflammation brought on by an infection might cause diarrhea. By attaching itself to an enterocyte after ingestion, an enteric organism colonizes the intestinal epithelium. Depending on the offending organism, either mucosal invasion or enterotoxin generation is the usual course of action.

**III. MATERIALS AND METHOD**

The study is being conducted on males between the ages of 18 and 25 at the Sree Ramakrishna Medical College of Naturopathy and Yogic Sciences and Hospital in Kulasekharam, Tamil Nadu, India. After the study's goal was clarified, verbal consent was acquired. This experiment involved thirty participants. Thirty questions make up the questionnaire. The characteristics of the questionnaire included the following: drugs, gastrointestinal distress, stress, food and water hygiene, and any illnesses. The study was stopped on female subjects who refused to participate or were not cooperative.

**IV. RESULT**

The female respondents ranged in age from 18 to 25. Thirty women were participated in this study. According to Table 1.1, Have Food allergy 33.33% and 66.66% do not have food allergy. Have the symptom of Nausea 53.33% and 46.66% not have the symptom. Bloody stools 3.33% and 96.66% not have bloody stools. Often tired 86.66% and 13.33% do not have the symptoms. 10% done abdominal surgery and 90% not undergone abdominal surgery. Feel thirst often 76.66% and 23.33% do not feel thirst often. Travel in bus or train frequently 56.66% and 43.33% do not travel in bus or train frequently. Consuming street foods very often 20% and 80% not consuming street foods very often. Taking non veg frequently 56.66% and 43.33% not taking non veg frequently. Taking food from the hotel or restaurant frequently 20% 1987 and do not 80% taking food from the hotel or restaurant frequently.

Table 1 shows, Evaluation of acute diarrhoea among 18-23 Years

S. NO	CONTENT	YES(%)	NO(%)
1	Have Food allergy	33.33%	66.66%
2	Have the symptom of Nausea	53.33%	46.66%
3	Have Bloody stools	3.33%	96.66%
4	Are you becoming tired often	86.66%	13.33%
5	Are you frequently taken any antibiotics	26.66%	73.33%
6	Any abdominal surgery	10%	90%
7	Feel thirst often	76.66%	23.33%
8	Travel in bus or train frequently	56.66%	43.33%
9	Consuming street foods very often	20%	80%
10	Habit of taking non veg frequently	56.66%	43.33%
11	Taking food from the hotel or restaurant frequently	20%	80%
12	Habit of biting nails	30%	70%
13	Wash your hands properly after using toilet	100%	Nil
14	Drainage system in your area openly exposed	6.66%	93.33 %
15	Keep the food openly exposed	10%	90%
16	Oral re-hydration solution at the time of diarrhoea	63.33%	36.66%
17	Complaint of flatulence	46.66%	53.34%
18	Sanitize your house often	93.33%	6.66%
19	Diarrhea during summer	63.33%	36.66%
20	Diarrhea during winter	33.33%	66.66%
21	Giddiness after diarrhea	60%	40%
22	Stressed because of diarrhoea	66.66%	33.33%
23	From rural area	63.33%	36.66%
24	Refrigerate your food for next day use	60%	40%
25	Intake of 3 liters of water per day	53.33%	46.66%
26	Clean your vessels properly	100%	Nil
27	Have Irritable bowel syndrome	6.66%	98.33%
28	Have the symptom of headache	70%	30%
29	Passing stools more than 5 times a day	66.66%	33.33%
30	Fever at the time of diarrhoea	30%	70%

The habit of biting nails is 30% and 70% is not the habit of biting nails. Wash your hands properly after using the toilet 100%. The drainage system in your area is only exposed 6.66% and 93.33 %, drainage system are closed. Keep the food openly exposed to 10% and 90% keep the food closed. Oral re-hydration solution at the time of diarrhoea 63.33% and 36.66% do not take oral re-hydration solution at the time of diarrhoea. Complaints of flatulence 46.66% and 53.34% do not have complaints of flatulence. Sanitize house often 93.33% and 6.66% do not sanitize the house often. Diarrhoea during summer 63.33% and 36.66% do not have diarrhoea during summer. Diarrhoea during winter 33.33% and 66.66% do not have diarrhoea during winter. Giddiness after diarrhoea 60% and 40% are not having giddiness after diarrhoea. Stressed because of diarrhoea, 66.66% and 33.33% are not stressed because of diarrhoea. Rural area 63.33% and 36.66% are not in rural areas. Refrigerate food for next day use 60% and 40% do not refrigerate food for next day use. Intake of 3 litres of water per day 53.33% and not 46.66% intake of 3 litres of water per day. 100% clean. Irritable bowel syndrome 6.66% and 98.33% do not have irritable bowel syndrome. Headache 70% and 30% do not have headache. Passing stools more than 5 times a day, 66.66% and 33.33% are not passing stools more than 5 times a day. Fever at the time of diarrhoea 30% and 70% do not have fever at the time of diarrhoea.

## V. DISCUSSION

More females, 33.33%, are affected by food allergy and have the symptoms of Nausea, 53.33%. Often tired, 86.66%. Most females felt thirst often, 76.66%, and traveled by bus or train frequently, 56.66%. More females intake non veg frequently, 56.66%. Taking food from the hotel or restaurant frequently, 20% fewer females have the habit of biting their nails 30%. Wash hands properly after using the toilet 100%. Most females use oral rehydration solution at the time of diarrhoea 63.33%. Females complaint of flatulence 46.66% and sanitize house often 93.33%. Diarrhoea during summer is 63.33%. Giddiness after diarrhoea is 60%. Stressed because of diarrhoea 66.66%. It mostly occurs in rural areas, 63.33%. Refrigerate food for the next day using 60%. Fewer females intake 3 liters of water per day, 53.33%, and cleaning vessels properly 100%. Most females have the symptoms of headache 70%. Passing stools more than 5 times a day 66.66%. Fever at the time of diarrhoea 30%.

## VI. CONCLUSION

The majority of women with acute diarrhoea diseases are found to have pain, more frequency of defecation, boredom, tiredness, and abdominal discomfort. Their everyday routines are not up to par. Women therefore need to be better informed about the need to eat a healthy diet, the dangers of junk food, the effects of gut dysbiosis, and avoid intake of adulterated food. Future medical interventions should concentrate on these areas to improve the young woman's general health and wellness and to improve the awareness of oral rehydration solutions and water drinking.

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