

# Gastroenteritis In Pregnancy: Relevance and Remedy

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Dear Editor,

Acute Gastrointestinal Infection (AGE) affects general population, but infections during pregnancy are associated with adverse outcomes including miscarriage, premature rupture of membranes, preterm birth, growth restriction and still birth [1]. Pregnant women may be more vulnerable to complications, so there should be a lower threshold for investigation, admission and treatment. In the uncommon event of progression to critical illness, there are subsequent risks to the foetus from both maternal illness and treatment [2]. Antenatal women belonging to low socioeconomic strata living in suburbs with poor knowledge about sanitation are more prone to develop gastroenteritis.

Based on these considerations, an observational prospective study was conducted over a period of six months, July to December 2016 in community based BJRM hospital, New Delhi, India. Informed written consent was obtained from all the participants. Ethical clearance from the institution was sought and was cleared for the same. Information was collected regarding demographic profile, drinking water supply, method of sterilization of water, sanitation facilities, duration of hospital stay and awareness regarding safe drinking water and sanitation. The study subjects were evaluated for cause of AGE, fetal wellbeing and any complications. Out of 356 antenatal admissions during the study period, 90 (25.28%) admissions happened due to acute gastroenteritis. 50% of the patients were illiterate and 74.4% of women were below the age of 25 years. About 50% of women were primigravidae. 60% of women were not getting proper water supply. 80% of women were not using any disinfection technique to ensure safe drinking water. 55% (n=50) of women were admitted for three to five days in hospital. 13.3% of antenatal patients had dehydration and 10% women had electrolyte imbalance. All the women were managed conservatively with intravenous fluids and antibiotics. Two females went into preterm labour and only one woman had intrauterine demise [Table/Fig-1].

In the developing world, infectious causes of diarrhea are largely related to contaminated food and water supply [3]. The same is highlighted in our study. Poor literacy and low socioeconomic status lead to lack of awareness regarding importance of safe drinking water and hygienic food conditions [4]. It is also important to have a low threshold for admission of antenatal patients presenting with AGE as it may result in maternal or foetal mortality if timely intervention is not done. So, hospital admission is required for maternal and foetal

Different aspects	Variable	No. of women	Percentages
1. No. of antenatal women admitted (n=356)	Antenatal women with GE	90	25.28%
2. Education Status	Illiterate	45	50%
	Primary	28	31%
3. Drinking Water Supply	Government supply	54	60%
	Subsoil water	26	28.8%
4. Method of sterilization	None	72	80%
	Boiling	08	8.8%
5. Sanitation Facility	Community	37	41.1%
	Personal	53	58.8%
6. Hospital Stay	2 days	31	34.4%
	3-5 days	50	55.6%
7. Morbidity	Dehydration	12	13.3%
	Electrolyte Imbalance	9	10%

**[Table/Fig-1]:** Demographic Profile.

monitoring as well as to maintain hydration. Investigations such as stool examination, renal function test, complete haemogram and platelet count may be required. Blood cultures may be done if there is suspicion of *Listeria*. Foetal assessment should be done. Antibiotics are not routinely recommended for most cases of AGE as most episodes are self-limiting and relatively harmless except listeriosis which can directly harm the fetus. In our study empirical antibiotics were started as patients were from endemic suburban area. *Listeria* and *Salmonella* infections are two culprits which can lead to maternal and foetal morbidity. Hence, given that in low resource country like ours, where lack of sanitation and poor drinking water supply are prevalent, antenatal women with AGE should be well hydrated and prevention in the form of safe drinking water and hygiene should be maintained.

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