Fifteen people have died of gastroenteritis in Faisalabad and the remedy that the health department has come up with is excessive chlorination of water which the WHO finds hazardous for health

By Aoun Sahi

While the government is making tall claims about provision of safe drinking water by 2007 throughout Pakistan, deaths due to consumption of contaminated water are being regularly reported from different parts of the country. In Faisalabad, the third largest city of Pakistan, at least 15 people have died in the space of one week because of an outbreak of gastroenteritis. The residents blame it on the Water and Sanitation Agency (Wasa), a public entity.

Most affected are the residents of a slum opposite D Block of Ghulam Muhammad Abad (GM Abad), a most thickly populated areas of Faisalabad. The water supply pipelines to this area pass through a big sewer that contains effluents from many industrial units of the city. The residential area is located just 200 metres from the sewer.

"At least seven people, mostly children, have died in our area from gastroenteritis," says Fazal Din of GM Abad, whose 8-year-old son, Ahsan, was amongst the very first victims of the gastroenteritis outbreak. "Ahsan died on May 18. I had rushed him to a hospital after he vomited many times and complained of stomach cramps. But in vain.

"On May 16 and 17 the electricity supply to our area was disrupted due to an earlier storm, consequently we did not get water from Wasa for more than two days. On May 18, when the water supply resumed, the water looked brackish and gave a foul smell. People drank if for a lack of choice and complained of stomach cramps. But in vain.

Other residents of the area told TNS that during the first couple of days the government hospitals did not even have appropriate medicines to treat patients suffering from gastroenteritis. "When I came here on May 18, not even a single doctor was available to attend me," says Shahid, a 30-year-old patient admitted to General Hospital, GM Abad. "I survived because I had age on my side and had greater resistance. I saw many children and elderly people, in apparently better condition than me, die just because of an absence of doctors or proper medicines in the first couple of days of the outbreak," he complained.

According to independent sources at least 15 people have died so far due to this epidemic. Officially, the toll is nine.

"Besides contaminated water, contaminated food or rotten fruit can also cause gastroenteritis," says Dr Muhammad Javed, executive district health officer, Faisalabad. "The samples we sent to National Institute for Biotechnology & Genetic Engineering (NIBGE) Faisalabad on May 19 from four different houses of the affected areas, were devoid of the bacteria that causes gastroenteritis."

Naib nazim of Union Council 280 GM Abad, Malik Muhammad Asif, verifies the doctor's claim but to a certain extent. "My mother complained of gastroenteritis just two days back, though we only use boiled water. It is right that there was some 'problem' with water on the night of May 18 when Wasa resumed the supply after a gap of some 20
hours due to an electricity breakdown. But I don't we can say for certain that outbreak has been by water supplied by Wasa," he adds.

NIBGE director Dr Yusuf Zafar confirms the four samples provided by the city district government on May 19 did not contain pathogens that cause gastroenteritis. Later, the institute on its own collected water samples from the same houses, but found no gastroenteritis causing bacteria in it.

"At the same time," Dr Zafar says "we took samples of drinking water from the institute's own housing society that is also provided by Wasa. We did this just to check our system, and very surprisingly found that the samples from the institute's colony had around 1000 units of pathogens per millimetre in it. According to strict standards, water should be free of pathogens. This was strange and that is why we further investigated the samples we got from the affected areas (GM Abad) and found that they had excessive amount of chlorine in them. The acceptable level of chlorine in drinking water is 0.04 particles per million but in these samples the chlorine's ratio was 0.1 ppm or 250 per cent more than the acceptable level. How can pathogens survive in water laced with such huge quantity of chlorine?"

The EDO Health Faisalabad Dr Muhammad Javed confirms usage of high quantity of chlorine in drinking water in affected areas "to protect people from harmful bacteria." He adds excessive chlorine in drinking water poses no threat to human health.

A World Health Organization (WHO) report disagrees. 'Chlorine in Drinking-water' says excessive amount of chlorine in drinking water can even cause cancer. "It has been reported that asthma can trigger from exposure to chlorinated water. An increased risk of bladder cancer appeared to be associated with the consumption of chlorinated tapwater," states the report.

District Health Officer Faisalabad, Rana Imran, says 80 per cent of the patients hit by the gastroentritis outbreak hail from the slum areas of GM Abad. "These are the areas where water pipelines have not been changed for the last 47 years while in most parts of the city Wasa replaced the old water supply pipes in 1982."

It would appear that even the 'new' pipes need to be inspected as the average age of Wasa pipelines is stated to be around 22 years.

According to DHO, between May 18 and the morning of May 25, 10,369 patients complaining of gastroenteritis had visited government and private hospitals in Faisalabad. General Hospital GM Abad received most of the patients.

"The patients who came to us had a common complaint -- they felt pain in stomach after drinking water from the Wasa supply lines on May 18," Imran says.

The Local Government Ordinance, 2001, clearly states that the provision of drinking water is responsibility of 'concerned local governments' (clause 94 Water Supply). However, district nazim Faisalabad, Rana Zahid Tauseef, is as yet unable to identify the department or persons responsible for the gastroenteritis outbreak in the city. "A four-member committee is investigating the matter and those found responsible will be punished," Tauseef tells TNS. "Half of Faisalabad city gets its drinking water from Wasa. Wasa's water distribution system here is outdated and we have already started replacing it." he says.

Community-based organisations and NGOs in Faisalabad believe the problem is locating the exact point where the water is getting contaminated.
"The Survey of Pakistan's ariel maps were last produced in 1969 (before that in 1955) and updated for the larger cities in 1972-74," says Malik Nazir Ahmed Wattoo, team coordinator Anjuman Samaj-i-Behbood, Faisalabad. "The planning department in Faisalabad is still relying on these 1969 maps. The absence of documented physical and social infrastructure leads to inappropriate projects, corruption, inflated costs and severe problems in operation and maintenance. In the absence of up-to-date mapping all planning is done on ad hoc basis. Like they have decided to replace the whole water pipelines of the city rather than locating the point where drinking water is being contaminated."

According to Mian Hamid Sultan, coordinator Faisalabad Urban Resource Centre, provision of clean water to all till 2007 is still a distant dream for Faisalabad. So far not even a single water filtration plant has been installed here. "Wasa's underground water storage tanks are also not properly protected. Walls built to protect these tanks are not higher than 5 or 6 feet and there is one guard on duty 24 hours," he says.

Mirza Saifurehman, president Anjuman Behbood-e-Ghariban, Faisalabad, says that over the last four years Faisalabad has been given just Rs 66 million under the Punjab Development Programme -- while to give you an idea, Rahim Yar Khan's share in it over the same period has been Rs 318 million.

"In contrast, Faisalabad's contribution to taxes collected by the Central Board of Revenue between 2001 and 2005 has been Rs 48 billion," he says. "What are we getting in return? A gastroenteritis epidemic in Lahore draws a promise of Rs 1 billion from the chief minister, but we are promised just Rs 200 million."

A Wasa official says that since the introduction of the new local government system Wasa Faisalabad has not got a single penny for its development projects while 80 per cent of its revenue goes into paying electricity bills. The present district nazim, who is also chairman Wasa, has not held a single meeting with Wasa officials since his election.

"We requested the government for a grant of Rs 550 million for upgrading projects. The provincial government had approved it, while the federal government turned down the request just three days before this incident, saying: "We do not have money to spend on drinking water schemes because money is being spent on making big dams." He also says that the quantity of chlorine in water has been doubled after the outbreak. The health department is also responsible for checking the quality of water, he says and asks why is it that the entire blame has been heaped on Wasa.

"If water being provided by Wasa is contaminated the whole city may have the same problem as we are providing water to the whole city from a single source," says Waseem Ahmad Hashmi, director operations and maintenance, Faisalabad.

He suggests things be looked in a broader context. By way of an example, he says while everyone knows that underground water in Faisalabad is undrinkable, there is no one to stop all the ice factories from using the same. "I personally surveyed all the ice factories of Faisalabad after the gastroenteritis outbreak to confirm this. It could well be a possible reason for the outbreak of gastroenteritis," he adds.