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Arsenic-a curse for people

Ayesha Akhtar, an ordinary but happy housewife of village Badyabazar in Sonargaon, 16 miles southeast of the capital, became gloomy when she was told by her physician that she had developed symptoms of arsenic contamination on her body, reports BSS.

For long eight years, Ayesha, who is in her mid thirties and mother of five children, had not known that she had been suffering from the deadly arsenic poisoning. Only six months back, the doctors had diagnosed that she was a victim of arsenic poisoning and prescribed her vitamin tablets and ointments. But there were no signs of any improvement in her condition.

Ayesha said: "I am getting weaker day by day. I have been taking medicines for the last six months. But I feel no relief and I am unable to resume my normal activities." Her husband Serajul Mia was sitting beside her when she was talking to this correspondent about her sickness in a feeble voice.

The first signs indicating a person has been attacked by arsenic contamination are the darkening of his skin. When told about the disease by her doctor, Ayesha remembered that her skin had been like that for the last seven to eight years.

The tubewell in the yard of her house was sunk eight years ago. After she had used the water of the tubewell for one and a half years, black marks started appearing on her body. At first, she could not understand the nature of the disease that gradually spread to her hands and feet.

The tubewell in the yard of Ayesha's home was marked "red" by the government health officials signifying that the family cannot drink the water of this tubewell.

According to the physicians, the arsenic's slow creep may affect different people differently. They say the arsenic poisoning for 10 years can lead to several forms of cancer and result in some other deadly diseases. Though all the seven members of Ayesha's family had used the water of the same tubewell, only she had fallen prey to arsenic contamination.

Doctors say nutrition level could be a critical factor as far as arsenic contamination is concerned in Bangladesh where most rural people are malnourished.

The bulk of illiterate rural people are still unaware of the magnitude of the problem. But the fallout of the arsenic-contaminated water has been a deadly health hazard threatening the lives of millions.

A nationwide random survey conducted with UNICEF support found the existence of arsenic contamination in tubewell waters in 61 out of 64 districts.

The survey found that about 29 per cent of all tubewells are contaminated with arsenic over the acceptable limit and 24 million people are at risk of developing arsenic poisoning. So far 7500 cases have been identified, the UNICEF survey said.

In the village Badyabazar, Ayesha and her family members now use water from a green-marked tubewell. They also use three-pitcher filter for which they can collect only two pitchers of water needs for drinking water. They have to use water from other sources for washing utensils, clothes, etc.

It was now clear that multiple solutions had to be adopted by the rural people of Bangladesh in order to tackle the arsenic menace.

BRAC, a non-government organisation (NGO), in collaboration with the Department of Public Health Engineering and UNICEF, started an action research on community-based mitigation in two upazilas—Sonargaon in Narayanganj and Jhikorgachha in Jessore in March 1999.

The main options being pursued by BRAC and UNICEF are: treatment of surface water with pond sand filter (PSF), collection of rainwater in rain water harvesters (RWH), treatment of ground water with home-based filters and use of shallow ground water through dug wells.

In different parts of Sonargaon upazila, a number of alternative safe water options are now in operation as demonstration units to raise awareness level of the community people. Thus a system is expected to be developed to involve the community in choosing, financing and implementing safe water systems on their own.

The options have been assessed after considering the initial and running costs, easy way of implementation, requirement for maintenance or ongoing supervision, provision of an intermittent or continuous supply, susceptibility to bacteriological contamination and acceptability by the local community.

None of the options have proved flawless, none are found as easy to use as the tubewell water directly. However, home-based three-pitcher filters, which can be manufactured easily by using local materials, are proving most popular for their low cost and easy-to-use. Taka 250 is required for a single unit of three-pitcher filter that can be used for four months.

It may be necessary to sterilise in pitchers before use to avoid secondary contamination of the water with bacteria during filtration.