

## 〔Counseling〕

“Water is life. You can refuse to provide food or money but you cannot refuse to give water”.

**Proverb**

**C**ounseling of people for public education and social mobilization is an important aspect in arsenic endemic area. We should have sufficient authentic information about arsenic and arsenicosis before starting counseling. Knowledge should be shared between technical persons and affected people.

There is a common practice that Government denies or suppresses the information of arsenic contamination when it is first discovered (Ravenscroft et al., 2009). It is due to reliability of information; chance to develop panic among

the people, and lack of confidence to solve the problem. However, this type of ignorance does not protect people from arsenic contamination. Instead, delayed response increases avoidable morbidity and mortality.

A study conducted in Bangladesh after 5-6 years of detection showed that more than 60% of people have no idea about arsenic. It is necessary to motivate the people, what is arsenic? It is a poison present not only in water, but also in food and air. Actually it is present everywhere and does not produce any health problem until the concentration is high.

Who will be the target members for counselling? It will be better if all the members are included in counseling. But it is difficult in endemic area of highly populated, particularly in Bangladesh and West Bengal. In that case, it is better to do counselling the head of the family. Allow the people, who cannot read, to ask question about arsenic. In addition, counseling may be done at school or college level. Continue to educate children about the serious health risks of consuming arsenic contaminated water. Repeated information about arsenic and its consequent health effects are important.

Advise the patient and other family members not to drink arsenic contaminated water. This water is not useable for cooking purpose. The water of red marked tube well may be used for bathing, and washing utensils. Arsenic contaminated water should not be used to drink by cow, chicken or other household animals.

The level of arsenic in hand pumped tube wells was estimated by national testing campaign in Bangladesh. Subsequently the level of arsenic was never estimated. It is unfortunate. Periodic estimation of arsenic in tube well water is vital. Motivation of people is necessary for periodic check up of both red marked and green marked hand pumped and motor driven tube wells for the level of arsenic with the help of local government. Advise the people to take

mitigation option of using arsenic safe drinking water.

Like adult, arsenic is not safe for extreme of ages: child and elderly people. Expectant mother and lactating mother are not safe. Arsenic crosses the placental barrier and reaches the fetus.

Explain the people that arsenic and iron in water are not same problem. Arsenic is not a germ. It can not be killed by boiling the water.

Arsenicosis is not a contagious disease. Eating or sleeping with someone who has arsenicosis, a healthy person could be infected.

Dietary counseling is required. Avoid high arsenic contaminated food. Each patient needs to take plenty of green leafy vegetables containing vitamins. Intake of nutritious food is also beneficial for the patient. Supplementation of vitamin A, C and E tablets may be taken by the patient continuously daily for three months followed by drug holiday of one month. The amount of vitamins depends upon the age of the patient and severity of non-malignant symptoms. Intake of high concentration of vitamin may cause adverse effects.

People in arsenic endemic area are willing to walk a long distance to avoid exposure if the source for arsenic-free water is a hand pump tube well. If the source for arsenic-free water is surface water, however, people are less likely to walk a long distance to take avoidance measures (Aziz et al., 2006).

Persons with poor health may also find it inconvenient to travel a long distance to collect arsenic safe drinking water.

## References

- [1] Aziz, S. N., Boyle, K. J., & Rahman, M. (2006). Knowledge of Arsenic in Drinking-water: Risks and avoidance in Matlab, Bangladesh. *Journal of Health,*

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- [2] Ravenscroft, P., Hugh Brammer, H., & Richards, K. (2009). Arsenic pollution: A global synthesis. Wiley-Blackwell, p 214.

### \* Myth 1

Arsenical keratosis is a contagious disease.