

Thesis Title	Mothers' Beliefs Concerning Water Consumption and Arsenic Poisoning of Children under 5 Years of Age : A Community Study in Nakorn Si Thammarat Province
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ABSTRACT

This research is a qualitative one, the objective of which was to study the behaviors of water consumption of children under the age of five, as well as the beliefs of mothers with respect to arsenic poisoning and water consumption by children under the age of five. The study was conducted in a community in Nakorn Si Thammarat Province. The sample groups subjected to the study were two groups of mothers whose children were under the age of five. The first group were mothers whose children suffered from arsenic poisoning. The second group were mothers whose children did not suffer from arsenic poisoning. Three months' time was spent for the collection of data in the community through survey, document research, community participatory observation and in-depth interviewing.

The study revealed that the mothers of both sample groups, i.e., the group whose children suffered from arsenic poisoning and the group whose children did not

suffer from arsenic poisoning, had an incorrect belief with respect to arsenic poisoning. That is, they believed that it was caused by sources of ore-washing water with aensely muddy color and with a rusty odor. Patients suffering from this sickness would develop a condition of skin-stripedness, with dark dots over the body, which would not do harm to the body. So mothers would not care about taking their children to receive medical treatment, and the only prevention was not to allow children to go to any in densely muddy water in the areas of old mine water sources. In addition, with respect to their belief about water sources, the mothers preferred consuming water from sources of clear and odorless water, which the survey revealed had a high content of arsenic.

Although both groups of mothers shared the same belief regarding water sources, some children were found to have received no arsenic at all. This is due to the children's different living places. That is, areas on mountain ridges would have a lower content of environmental arsenic than lowland areas between mountains, thus accounting for the difference in the levels of arsenic adulteration and contamination in the children's consumption of food and water. In addition to the foregoing, factors giving rise to the sickness were found as follows.

The direct factors are consumption of water adulterated and contaminated with arsenic in the forms of drinking water and ice.

The indirect factors are consumption of water used in cooking soups, breast-feeding, and the consumption of cooked green vegetables. It was found that in the culinary tradition of southerners, the consumption of vegetables with soups would result in the body receiving

arsenic. Further mothers believe that drinking boiled well water is a way to prevent blood from accumulating in the back. It is also felt to restore the uterus to its normal size. These account for the presence of arsenic contamination and contamination in the mother's milk.

Regarding rain water consumption, mothers preferred consuming well water because of its tastiness and a feeling of satiation that it gives and also because the task of storing rain water belongs to housewives. However, there is also belief that if after childbirth a mother is exposed to rain water, she would get a malignant fever which could kill her. It is this fear that keeps mothers from storing rain water for consumption. In addition, washing water jars must be done every two days to make them clean enough to be used for storing water for consumption. Formerly, jars used by mothers were of small size but with the government supplying every family with large jars, women are unable to get into these jars to wash them because there is a belief about a disgrace to family heads (males). So this task must fall to men. But since men do not have enough slack time, the task of washing water in jars does not meet with success, no matter how many jars the government may invest money to buy. So long as the local residents' beliefs and their agreement with respect to storing rain water remain unchanged, the use of rain water instead of well water will mainly never take place in the community.

Recommendations for solving arsenic poisoning in children are divided into 4 levels as follows.

The individual level is to educate mothers in villages about arsenic poisoning in children in a correct manner and one consistent with the cultures of the community.

The family level is to stage campaigns and establish an understanding with family heads and senior family members with respect to storing rain water for the purpose of drinking and cooking.

The community level is to provide knowledge that will give rise to awareness of the problem of arsenic poisoning in children and methods of preventing. This may come in the form of controlling ice production or the sale of foods in which water from water sources with a high arsenic content is used.

The state level is 1) to promote incomes and the cultivation of substitute cash crops that are used for food, including an integrated market system, 2) to study and research about the condition of the health of the people in Ronphiboon District and nearby districts and 3) to proclaim this area to be an environment revival zone by making a white paper for submission to high-level administrators of the relevant agencies.