VILLAGERS' SURVEILLANCE SYSTEM FOR WATER FLUORIDE LEVELS AND FLUOROSIS IN ANALAYO SUB-DISTRICT

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SUMMARY: In 2010, the villagers of Analayo sub-district learnt that their discoloured teeth were a result of consuming unsafe water containing excessive fluoride (F). They also found the F content of the underground water fluctuated after earth-quakes. In order to keep the villagers and the new generation of children safe from F toxicity, they agreed to conduct an annual surveillance program on every National Oral Health Day, October 21. The surveillance program consisted of: 1) determining, by using a F test kit, the F content in every source of water used for consumption; 2) screening for dental fluorosis in school children; and 3) screening for skeletal fluorosis in those aged over 45. The program was carried out by a group of trained villagers using simple screening tools developed by the Intercountry Centre for Oral Health (ICOH). The data were analyzed for new cases and the results recorded by mapping. The information was then disseminated. After the evidence was collected and presented on a number of occasions, in August 2013 the provincial governor visited the community and made the important decision to provide a safe piped water system for them at a cost of more than 5 million baht. The generation and repeated presentation of valid evidence on the water F levels and the prevalence of dental and skeletal fluorosis assisted the decision-making process leading to the provision of a safe community water supply.

Key words: Analayo sub-district, Thailand; Decision-making; Fluorosis; Surveillance.

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