Latrines and Household Well Water Quality in Wa

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ABSTRACT

In many developing countries of the world, the utilization of ground water is very common due to factors such as water scarcity and its relative good quality. On the other hand, basic sanitation is a challenge in many developing countries with most rural and peri-urban communities relying on on-site sanitation systems which are often poorly managed. This study, conducted in Wa the Upper West region of Ghana, aimed at assessing the influence of on-site sanitation systems on hand dug well water quality. Samples were randomly collected from thirty wells and tested using standard methods for physico-chemical and microbiological indicators of water quality. Questionnaires were administered to assess the general knowledge and perception of respondents on the quality of the water they used for domestic purposes. Also, observation was made on the general conditions of wells from which samples were collected and available sanitation structures. It was found from the study that, all the parameters assessed were within the WHO recommended limits except bacteria (of faecal origin) and turbidity. Significant variations in conductivity, total dissolved solids, temperature and turbidity were observed between the dry and the rainy seasons. All the water samples were found to be positive for bacteria. The study also revealed majority that of respondents were content with their well water quality. Educational campaigns need to be undertaken to create awareness about the quality of well waters, human activities that adversely impact on the quality of well waters. Wells should be located at a minimum distance of 50 meters from a pit latrine in order to reduce contamination. The
government through the Municipal Assembly should make available disinfectants to enable residents disinfect their waters.

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