



Sanitation and risks of waterborne diseases in Aholouyèmè in the commune of Sèmè-Kpodji (BENIN, West Africa)

^{1,3}Marc SOHOUNOU, ^{2,3}Expédit Wilfrid VISSIN, ^{2,3}Gervais A. A. ATCHADE, ¹Patrick A. EDORH

¹Biochemistry and Cellular Biology, University of Abomey-Calavi (UAC), BP 2899 Abomey-Calavi, Benin

²Laboratory Pierre PAGNEY: Climate, Water, Ecosystems and Development, University of Abomey-Calavi 01 BP 526, Cotonou

³Department of Geography and Regional Planning, Faculty of Letters, Arts and Humanities, University of Abomey-calavi, BP 2899 Abomey-Calavi, Benin

Mail: borismarcs@gmail.com

Original submitted in on 17th February 2016. Published online at www.m.elewa.org on 30th April 2016
<http://dx.doi.org/10.4314/jab.v100i1.5>

ABSTRACT

Objective: The present study aims to analyze the risk of diseases related to bad conditions of sanitation in the district of Aholouyèmè, in Benin.

Methodology and Results: To achieve this goal, a statistical approach was adopted. The methodological process implemented documentary research, field survey through observation, investigations using questionnaire, interview guide and data analysis at laboratory.

In order to understand the degree of pollution, some hydraulic infrastructures (wells) were sampled. The samples were analyzed in the laboratory of the control of Food Safety at the ministry of Agriculture in Benin. After fieldwork, the data was analyzed.

Conclusion and application of results: Field investigations showed that the water wells dug in each village by The Head Office of Water (Ministry in charge of water and mines) are not functional any more. In addition, there was no water point installed by National Society of Waters in Benin. All sampled wells were microbiologically polluted. The presence of the faecal coliforms, streptococci and *E. coli* revealed a faecal contamination of water. Consequently, water from those wells was not safe for human consumption. Many waterborne diseases such as intestinal parasitosis, febrile diarrhoea and cholera prevailed in the district. The origins of this pollution were multiple. It can be cited bad garbage management, absence of latrine, lack of sanitation around wells, non-respect of hygienic rules.

Key words: Aholouyèmè, sanitation, pathologies, drinking water, risks.