Prevention of cholera outbreak in Chorkor, Accra-Ghana

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Statement of the Problem: Chorkor is a fishing community in Accra, Ghana. It has a population of about 3000 people. Chorkor like many other communities close to the capitals of many West African countries suffers from overcrowding and pollution due to the inability of town planning activities to catch up with rural urban migration. Cholera is one of the leading causes of morbidity and mortality in Chorkor. The incidence of cholera tends to increase during the rainy season and cholera is responsible for about 30% of the total deaths in Chorkor. A close second is tuberculosis which is responsible for 15% of the total deaths and can easily be attributed to overcrowding.

Methodology & Theoretical Orientation: We carried out a descriptive cross sectional study to investigate the epidemiological link of the cholera outbreak in Chorkor Greater Accra region of Ghana. Index cases were identified with the help of line lists. Univariate analyses were expressed as frequency distributions, percentages, mean±standard deviation, and rates (attack rates, case-fatality rates etc.) as appropriate. Maps were drawn using Arc GIS and Epi info software to describe the pattern of transmission.

Findings: We found 1733 cases with 20 deaths (CFR=1.2%) with an overall attack rate of approximately 25 per 3000 population with sex specific attack rates of 24% and 18% for males and females respectively. 90 stool samples yielded V. cholerae O1 Ogawa with ciprofloxacin and tetracycline being sensitive to the cholera strains.

Conclusions & Significance: The lack of personal hygiene, safe drinking water, open defecation, poor sanitation and food were some of the causes of the cholera outbreak in Chorkor. We recommend the Ministries of Local Government and Rural Development, Works and Housing and Water Resources to ensure proper liquid and solid waste disposal systems and provide adequate potable water to the populace and also our research with the help of sustainable medical missions helped curb cholera in Chorkor with the distribution of fliers which educated them more on how cholera could be prevented.

Recent Publications


Biography

Seth Omari Mensah is a 5th year Medical Student of Kharkov National Medical University of Ghanaian Nationality. He has attended numerous conferences held in Ukraine, Denmark and Netherlands regarding various topics of healthcare to share and obtain ideas to assist the public in developing countries with a focus on his Nation of Origin, Ghana, to improve their health conditions.

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