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**INTRODUCTION:** Cholera, a key social development indicator remains an acute global public health threat (Dunkle, 2011 Penguele, 2011). Ghana has seen recurrent epidemics in recent years, posing health system challenge. This study aimed to describe, identify the cause and socio-economic factors associated with 2012 cholera outbreak in Osu-Klottey district for policy recommendations.

**METHODS:** We conducted descriptive and unmatched 1:2 case-control study. Cholera case-patient was person with acute diarrhea with/without vomiting in the district from 1st March to 30<sup>th</sup> November 2012. We interviewed participants on socio-economic, household hygiene, food, water exposures with structured questionnaires and mapped their residence geospatially. Data was managed and analyzed in Stata 11/SE.

**RESULTS:** Index case, 23 year old male Nima resident reported at Ridge hospital on 9<sup>th</sup> March 2012 after eating street-vendors 'Waakye'. The outbreak caused by *Vibrio cholerae* O1 El-Tor biotype, serotype ogawa had two peaks with total of 494 cases with three mortalities (Attack rate; 383/100,000 populations, 0.61% fatality). Age ranged 2-83; mean and median 31+/-14.4 and 27 years, respectively. Majority of cases were from Ayawaso and Osu-Klottey. Prompt case management, infection prevention practices, contact tracing, sensitization campaigns and proper cadaver disposal were instituted.

Monthly income, daily-food-expenditure ranged 10–500 USD and 0.50–25 USD, respectively among participants (237). Logistic regression analysis (95% confidence interval) showed age below 18 years (AOR = 7.69, CI 1.38–42.73), education below tertiary (AOR = 2.96, CI 1.16–7.54), exclusive household toilet facility (AOR = 0.289, CI 0.12–0.70), cold/warm food (AOR = 3.11, CI 1.34–7.23), home-food (AOR = 0.083, CI 0.39–0.18) and community pipe-borne water (AOR = 2.15, CI 1.04–4.44) were associated. Hand washing with soap-water, slum residence, and daily-food-expenditure below 5.0USD and alcohol ingestion showed significant association only with bivariate analysis.

**CONCLUSIONS:** Sanitary reforms and infrastructural development is crucial to combat recurrence of cholera epidemic, however multi-sectorial approach including oral cholera vaccine for the under-18 year olds would make significant impact.

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**Socio-Economic Factors Associated with Cholera Outbreak in Southern Ghana, 2012: A Case-Control Study.**

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