Typhoid fever continues to be a health problem in the world, affecting mainly poorer regions where sanitation and clean water are lacking. WHO shows that 21.7 million people are infected with typhoid every year. In Kenya, reported cases were 1830, 1429 and 4172 while deaths were 288, 183 and 309 for the year 1998, 1999 and 2000 respectively. The government of Kenya and some private bodies direct their efforts and resources towards the control of water and sanitation related diseases such as typhoid, cholera among others, through provision of improved water and sanitation, vaccination, environmental health education and prompt treatment. Nevertheless typhoid fever is still a problem in many parts of the country, with Kisumu district having the highest number Of cases in the country.

The main objective of the study was to determine the environmental and socio-cultural factors that have influenced the high prevalence of typhoid fever in the study area. The study was carried out among 200 respondents in Kisumu and Siaya districts. Household heads or their adult representatives were interviewed. Structured questionnaires, Focus Group Discussions, observation checklists, Key informant interview, were used to collect primary data. Health facilities such as hospitals, dispensaries, etc were visited and health records reviewed, and the health service providers were also interviewed. The study was cross-sectional in design, though the research employed longitudinal approach in determining the temporal patterns of the disease occurrences and utilized descriptive, inferential and analytical components. The study also involved water sampling for bacteriological analysis. Global Positioning System (GPS) was also used for georeferencing of selected health facilities and points of interest that were not currently covered by existing maps, and new maps were generated using the GIS technique. Data from questionnaires and direct observation were analyzed using Statistical Package for Social Science (SPSS) program. Chi square was performed to establish relationships between variables. Trend analysis was used to indicate the trend and patterns of typhoid cases in the study area. Fifty nine percent (59%) of the respondents were females and forty one percent (41%) were males. The study indicates that environmental factors such as, water, sanitation and hygiene have a direct influence on the prevalence of typhoid (X² =31.14, df =6; P = 000). While socio-cultural factors such as, age, education level, marital status, occupation, sex and religion influences the prevalence of typhoid indirectly. The study also indicates that people's knowledge, attitudes and practices influence directly the preventive and control initiatives adopted by the people in the control of typhoid fever( X² =25.07, df =8; P = 001). The findings will be useful to the environmental health stakeholders, and policy makers to try and develop typhoid prevention and management strategies. There is need for increased interaction between the public and private health sector. This may begin by putting in place mechanisms of improving knowledge gaps.