Abstract

There is need to look for nontoxic cheap alternative ways of fighting mutating and resistant disease causing microbes especially in sub-Saharan region. This is because of the lower average immune system strength due to bad feeding habits, high population and increase of disease causing organisms which are exacerbating the HIV and AIDS menace. The use of species to preserve, give flavour to food and to fight illnesses has been practiced in Africa since the invasion of Asian populations in the coastal regions. In this study, we investigated the potential of using common spices like Ginger (Zingiber officinale) and Chilli pepper (Capsicum annuum) against Escherichia coli, Pseudomonas aeruginosa and staphylococcus aureus which are common bacteria mostly found in contaminated food. This was done using the Kirby Bauer diffusion method. Ginger and chili pepper were found to inhibit the growth of the tested bacteria especially staphylococcus aureus through comparing the diameter of inhibition zones. The results indicated that extracts of ginger and chilli pepper had antibacterial activity in the range of 15-33mm. E. coli and Staphylococcus aureus were more affected by the extracts than Pseudomonas aeruginosa. However, a mixture of the two extracts produced a greater antibacterial activity than the individual extracts with p values nearing 0.05. Therefore, the extracts displayed an antimicrobial activity with greater efficacy when acting synergistically on the test organisms. Therefore, the potential of using the combination as a naturopathy is still high despite the perceived microbial resistance after a long time of usage in human populations.