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Chemical composition and antibacterial activity of essential oil of *Laurus nobilis* from Algeria

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Dried leaves and the essential oil (EO) of bay (*Laurus nobilis L.*) are used extensively in the food industry for seasoning of meat products, soups and fishes, this essential oils was extracted from leaves by hydrodistillation. The yield was 1%. The aim of this study was to evaluate the antibacterial activity of this essential oils against three bacterial strains *Staphylococcus aureus*, *Escherichia coli* and *Pseudomonas aeruginosa*. Orted that the high content of 1,8-cineole in the EO of *L. nobilis* contributed to its weak antimicrobial activity.

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Investigation of Lassa fever outbreak in Kastina State, Nigeria

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Lassa fever is an acute viral hemorrhagic illness caused by Lassa virus, a member of the virus family Arenaviridae. The disease is endemic in Sierra Leone, Guinea, Liberia and Nigeria with about 300000 to 500000 cases occurring yearly and about 5000 deaths. Its case fatality ranges from 5-35% but rose as high as 60% in the 2016 outbreak in Nigeria. On the 5th of April 2016, two cases of Lassa fever were reported in Katsina State. We, the NFELTP team investigated to confirm the outbreak, to describe its epidemiology, to assess the knowledge, attitude and practices of Lassa fever among health workers in the affected communities and to institute control measures. Active case search was conducted in hospitals and communities. We defined a case using established guidelines. We administered semi structured interviewer pretested questionnaires to health workers to assess knowledge, attitude and practices on the prevention and control of Lassa fever. We administered checklists of infection prevention and control (IPC) to the stakeholders to ascertain the level of preparedness of the State, LGA and health facilities to fight Lassa fever. We analyzed data with EPI Info version 7.2.1. The first index case of Lassa fever in Katsina State was a 38 year old patient managed at NNPC clinic Kaduna and later buried in Kankara LGA, Katsina State. The second index case was a 25 year old man, who presented at FMC Katsina with a history of having nursed his sibling for a similar illness in Gwagwalada about 25 days ago. A total of 82 contacts were line listed and monitored in the State; nine subsequently developed Lassa fever; eight were laboratory confirmed and one epidemiologically linked. The case fatality ratio was 27.3%. The result of the IPC checklist revealed that 40% of health facilities visited lack personal protective equipments, safety boxes, isolation wards and none had access to 0.05% or 0.1% chlorine solution. The result of the knowledge, attitude and practice showed that: 85% knew ways by which Lassa fever is transmitted, 95% knew how to protect themselves from contracting Lassa fever, 86% knew about PPE and 69% had no knowledge of case definition of Lassa. 4% of the respondents knew how to wash hands. Overall, 61% had poor knowledge of Lassa fever, 31% fair knowledge and 8% had good knowledge. This is the first reported case of Lassa from Katsina State. Most of the health facilities in the state lack basic infection prevention and control materials and basic knowledge on Lassa fever which should be addressed. We carried out sensitization talks and training on infection prevention and control at the health facilities. We recommend to the state to continuously sensitize the health workers on Lassa fever and to provide health facilities with safety boxes and full body personal protective equipment.

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