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Assessment of attitudes and practices of rural women towards malaria in Western Region, Cameroon: Strategic implications for prevention programs



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Background: In sub-Saharan Africa, a child under 5 years dies of malaria every minute. These results, though still alarming are better than in the past where a fatal case was recorded every 30 seconds. However, the elimination of this endemic disease remains a major challenge in the tropics particularly in Cameroon. Therefore, identification of community factors especially in rural areas in order to strengthen prevention strategies in the country would be of great asset.

Methods & Materials: A cross-sectional and analytical study was conducted from July to August 2011 among rural women in the health district of Dschang, West Cameroon. Data were collected by interview by the use of a questionnaire. Epi Info Version 3.5.3 was used for the analysis and Chi squared test (at $\alpha = 0.05$) for the comparison of proportions.

Results: 517 women, with median age 40 years were enrolled. On average, there were seven people per household with a child ratio (<5 years)/household 3/2. 4.9% of women were pregnant, with 32% having attended no antenatal care. 80% of women (93% of pregnant women), did not sleep under an insecticide impregnated bed net, the main reasons being: non-availability (46%), and non-acceptance (19%). Furthermore, among women complaining of fever (64%), no significant difference ($p > 0.9$) was observed between those who used the insecticide impregnated bed net and those who did not make use of it. Finally, the presence of the ceiling in some homes (45.2%) proved important as there was a highly significant difference ($p < 0.0001$) among women complaining of fever who dwelled in houses with a ceiling and those whose homes did not have.

Conclusion: The non-use of insecticide impregnated bed nets in rural areas resulted primarily from the non-availability and its non-acceptance. Therefore, a wide distribution of these insecticide impregnated bed nets combined with awareness campaigns, will not only promote accessibility and acceptability, but also their proper use, which will surely aim at achieving the Millennium Development Goal (MDG) number 6.

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Anthrax outbreak at disease investigation farm, Techiman, Ghana, 2013



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Background: Anthrax is a life threatening infectious disease that affects all warm blooded animals including man. It is caused by *Bacillus anthracis*. It occurs worldwide and it is irregularly distributed in places where repeated outbreaks occur. Anthrax is endemic in Northern regions of Ghana. There are effective vaccines against anthrax, and some forms of the disease respond well to antibiotic treatment. On the 15th February, 2013, the Central Epidemiology unit received a report from the Disease Investigation Farm (DIF), Techiman indicating sudden death of sheep on the farm. We investigated the source and the extend of the outbreak

Methods & Materials: The investigation was conducted at Disease Investigation Farm, Techiman. DIF is an experimental animal farm with 129 sheep of different age groups. A suspected case was defined as "Sudden death plus one of the following; - absence of rigor mortis, bleeding from natural orifices, subcutaneous swellings, rapid bloating, or dark non-clotting blood". Confirmed was defined as "A suspected case that is laboratory-confirmed". We reviewed veterinary records on anthrax vaccination coverage and the history of anthrax outbreaks in the farm. Key stakeholders such as the farm veterinarian, technicians and farm workers were interviewed.

Results: We found out that 2 sheep died on the 15th February 2013 and another died on the 17th February 2013. All the three (2.3%) were females. Veterinary records reviewed showed that the farm had anthrax outbreak in 1981, 1982 and 1984 which was followed by yearly vaccinations against the disease. The carcasses of the anthrax infected animals were buried uphill and presently that burial ground had been excavated and turned into homes. From 1995 to January, 2013, the farm did not vaccinate the sheep against anthrax.

Conclusion: Laboratory confirmed outbreak of anthrax in sheep occurred at the Disease Investigation Farm, Techiman, Brong Ahafo region in February, 2013. The source of infection of animals could be the soil. The team recommended yearly vaccination of livestock against anthrax disease for the next twenty years or more. As a result, 456 sheep and 3803 cattle were vaccinated in the municipality.

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