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***Plasmodium falciparum* parasitemia: levels of knowledge, attitudes and practices among pregnant women on initial attendance to antenatal care in Umuahia, Abia state, Nigeria**

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A clear understanding of the knowledge, attitudes, practices and the current status of infection of malaria in a community can inform the design of behavior change communication (BCC) campaigns to influence acceptance and use of any malaria control measure. This study determined the prevalence of *Plasmodium falciparum* infection among pregnant women on initial attendance to antenatal care (ANC), knowledge, attitudes and practices (KAP) about malaria and its control and their major sources of information on malaria. The study was carried out between February and April 2016, in two selected specialist's hospitals in Umuahia, where pregnant women registering for ANC were consented and recruited for the study. Well-structured questionnaires were used to determine their KAP towards malaria and their sources of information on malaria, peripheral blood smears were used as diagnostic tools to determine infection rates by microscopy. Out of 374 pregnant women examined on initial attendance to ANC, 210 (56.2%) were infected by *P. falciparum*, with primigravida 138 (71.13%) and those that came in their second trimester 120 (60.9%) having the highest and this varies significantly across gravida and trimester at $P < 0.05$. Majority 232 (62.0%) of the respondents had good knowledge about malaria, positive attitude 239 (63.5%) and good practices 198 (52.9%) towards its control measures. The media 110 (29.7%) and health centers/clinics 96 (25.9%) were their major sources of information on malaria. The prevalence of malaria among this study group was relatively high, many registered late to ANC which contributed to this high prevalence. Majority of the respondent had good knowledge, positive attitudes and good practices toward malaria and its control measures. The study advocated for early registration to ANC and improved sensitization of the pregnant women during ANC visits is necessary to address the gaps highlighted by the study.

Epidemiology, sero-diagnosis and therapy of *Leishmaniasis* in dogs and humansAzhar Maqbool¹, Haroon Zamir Durrani² and Abdul Manan¹¹The University of Lahore, Pakistan²Livestock Department, Punjab, Pakistan

The study was conducted in 28 cities which were located in the heart of the areas of endemicity of *Leishmaniasis* in Pakistan. Only cutaneous form of disease was found and no case of visceral form was seen. During this study a total of 33,600 human blood and lesion smear samples were collected and 12,428 samples (36.98%) were found positive for cutaneous *Leishmaniasis*, similarly a total of 16,800 dog blood and lesion smear samples were collected and 5,340 samples (31.78%) were found positive for cutaneous *Leishmaniasis* on microscopic examination by demonstration of Leishman-Donovan bodies. High percentages of cases in humans and dogs suggest that these areas are the established areas of cutaneous *Leishmaniasis* in Pakistan. It was found that sand-flies belonging to genus *Phlebotomus* were the vectors for the spread of infection in Pakistan. A total of 20,689 sand-flies were caught and nine species were identified during the study on the basis of morphology (sand-flies identified were 30% *Phlebotomus papatasi* (6,207); 17% *P. major* (3,518); 15% each *P. argentipes* and *P. orientalis* (3,104 each); 8% *P. alexandri* (1,655); 5% *P. sergenti* (1,034); 4% *P. longipes* (827); 3% each *P. bergeroti* and *P. pedifer* (620 each). PCR analysis of eight human and three dog samples was done; samples were collected from the study area. The PCR was so sensitive that it detected traces of DNA of *Leishmania* parasites. Therapeutic trials were conducted on hamsters with experimentally produced cutaneous lesions to evaluate the efficacy of topical application of pentavalent antimony compounds (sodium stibogluconate 10% and meglumine antimoniate 10%), imidazole compounds (clotrimazole 10% cream and Miconazole 10% cream) and indigenous herbal remedies (garlic extract 10%, onion extract 10% and harmala extract 10%). The antimony compounds were found to be very effective in healing the lesions in 7 and 12 days. The imidazole compounds healed the lesions in 21 and 36 days and herbal remedies healed the lesions in 50, 60 and 72 days respectively. All the treated wounds healed, leaving a minimal scar.