

pUCSI. The vacuolar ATPase (V-ATPase) gene was selected as target for RNAi and β -actin gene as a control. Then C6/36 cells were transfected with the pUCSI vectors and *Ae. albopictus* larvae were infected with recombinant AeDNV (recombinant AeDNV was obtained by cotransfection of pUCSI and helper plasmids pUCA into C6/36 cells). The interference efficiency was detected by the real-time PCR. The recombinant viruses were quantified by real-time PCR and its bioinsecticidal activity was detected by pathogenic change after its exposure to *Ae. albopictus* larvae.

Results: When C6/36 cells were transfected with pUCSI, the expression of V-ATPase was inhibited by a maximum of 90% comparing to its control counterpart at 96 h post-transfection. When *Ae. albopictus* larvae were transfected with recombinant AeDNV, the expression of V-ATPase was down regulated by 70% comparing to control counterpart. LT₅₀ bioassays demonstrated that the recombinant AeDNV had higher pathogenic effects than the wild-type virus.

Conclusion: The presented data displayed firstly that the recombinant AeDNV could be used as an effective delivery system for RNAi, which might provide a powerful tool for study of mosquito genome and development of a novel type of insecticide.

PP-239 *Ancylostoma* spp. in soil of public recreative areas of Culiacan and Navolato Sinaloa, Mexico

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Background: The soil of public areas such as parks and beaches can stay contaminated with parasites the pet animals mainly dogs and cats, that often have intestinal parasites that can disseminate through defecation in soil in public areas, and survive in adverse environmental conditions, representing a risk for health human and pets that have contacted with contaminated soil of parks and beaches that act as reservoirs or vectors of zoonotic parasites such as *Ancylostoma* spp. that can penetrate the skin of bare feet or hands of the host and produce Larva migrans, also known as creeping eruption or eruption sandworm, characterized by tortuous migratory lesions of the skin.

Methods: With the objective to determine the presence of *Ancylostoma* spp. in soil of parks and beaches of Culiacan and Navolato, Sinaloa, México; we took 545 composite samples of soil of 23 parks and seven beaches determined for representative samples described by the technique of Thrusfield (2005) was used: $n = [t \cdot SD / L]^2$, where n = sample size, t = value of the normal distribution (Student t) for a 95% confidence level (t=1.96), L = accepted error or precision (5%), and SD = weighted disease prevalence (%), was took 100 grams of surface soil scraping for each sample and deposited it in plastic bags; transferred to the laboratory of parasitology of the FMVZ-UAS to be analyzed by the sedimentation technique.

Results: Of the 545 composite samples of soil of 23 parks and seven beaches, 104 (19.08%), were positive to *Ancylostoma* spp.

Conclusion: The contamination of soil in parks and beaches with *Ancylostoma* spp. represents a risk for the human population considering are places of recreation frequently visited, should mention the importance of this zoonotic parasite to humans and therefore should be established

health control measures and provide health education, to know the human risk, the prevention and control.

PP-240 An outbreak of multidrug resistant *Salmonella typhimurium* in neonatal ward in Nepal

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Background: Nosocomial neonatal infections are responsible for bulk amount of mortality and long-term morbidity for infants in the neonatal intensive care unit (NICU). We are reporting an outbreak caused by a multidrug resistant strain of *S. typhimurium* in NICU in Nepal.

Methods: Outbreak occurred during the period of 3 to 18 may 2007 in the NICU at Om hospital and research center, Kathmandu, Nepal. Asymptomatic neonates during the period of infection were taken as control subjects (n=50). All infections occurred during first week of life. Stool specimens were obtained for culture in most of the cases, with blood specimens in two cases. Tryptic soy broth (BBL) moistened swabs were used to obtain specimens from inanimate objects in NICU. An investigation was undertaken to trace the source of infection. Culture, Identification, antibiotic sensitivity, and serotyping were performed by following the manual of American Society of Microbiology.

Results: A total of 17 isolates recovered from 17 babies hospitalized in NICU with common biochemical features and same serotyping. All these subjects developed diarrhea (n=17), out of them three developed septicemia, one case of meningitis and two expired. The strain was resistant to third generation cephalosporin due to production of an extended spectrum β -lactamase (ESBL) which was confirmed by double disk combination test. The strain was also resistant to ampicillin, amikacin, gentamycin, trimethoprim-sulfamethoxazole and chloramphenicol, susceptible to meropenem. Environmental culture also isolated similar strain from bed sheet and hands of healthcare providers. Outbreak was controlled after patient isolation, sterilization of NICU and effective hand washing measures.

Conclusion: This outbreak shows that simple carelessness may cause outbreak of potentially fatal pathogen in the hospital wards and can take the life of innocent newborns. Strict sanitation measures must be ensured in formula preparation and delivery procedure.

PP-241 Mortality and epidemiological transition in Bangladesh: lessons and experiences to the developing countries in the new millennium

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Background: This study aims to examine the stages of mortality and epidemiologic transition in Bangladesh where detailed studies are not well documented but significant decline in fertility and mortality have been achieved at a rather low level of income.

Methods: With the application of time-series and cross sectional analyses by using the nationally representative data (e.g. Bangladesh Demographic and Health Survey, 1993–2007, Sample Vital Registration System, 1981–2007) this study will investigate the patterns, levels and trends of mortality and morbidity and the causes of death. In addition author's own field work – a mix of quantitative