The impact of socioeconomic factors on risk and frequency of hospitalization for infectious diseases among teenagers in sub-sahara Africa

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Background: The association between socioeconomic status and illness in adults and childhood has been studied extensively but the relationship between socioeconomic status and the risk and frequency of hospitalization has not been well studied among teenagers. The purpose of this study was to shed light on the individual socioeconomic status on the risk and frequency of hospitalization in a survey among Teenagers in sub-sahara Africa. This study was to evaluate the influence of socioeconomic factors on the hospitalization of Teenagers with infectious diseases.

Methods: A survey of 1250 teenagers were conducted to ascertain the impact of socioeconomic factors on the risk and frequency of hospitalization of infectious diseases. The main exposure variables adjusted for confounding factors were parents education, parents income and residence location and type of apartment. Hence multiple linear regresional analysis was applied for the analysis.

Results: 1250 respondents with age 15.61 + 3.71 yrs, male 52.5%, female 47.5%. Teenagers with low income parents showed the greatest rate of hospitalization than for the average and high income parents. In respect of the risk of sickness, teens with high income parents showed the highest level compared to the average and low income counterparts. The risk of hospitalization was increased in teenagers of parents with a low level of education compared with vocational education. Malaria was the leading infectious disease in respective of the level of income, education, residence type and location. Malaria is a major health problem and among the top leading causes of morbidity and mortality in Africa. Low socioeconomic status showed a significant association with the rate of being sick of infectious diseases. There was no significant relationship that exist for the risk and frequency of hospitalization with the location and type of apartment.

Conclusion: The results of this study provides evidence that socioeconomic factors can be incriminated as a predisposing factor for increased rate of hospitalization but could not be established for the risk of infectious diseases. Hence, support for undertaking larger epidemiological studies to ascertain objectively the impact of socioeconomic status on the risk and frequency of hospitalization in sub-sahara Africa, so that future preventive efforts can be better understood.

doi:10.1016/j.ijid.2010.02.2124

Session: Parasites (Poster Presentation)
58.001
Seroprevalence of Toxoplasma gondii antibodies amongst pregnant women at Lagos State University Teaching Hospital
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Background: Toxoplasma gondii (T.gondii), an obligate intracellular parasite found in many species throughout the world, causes a variety of clinical syndromes in humans and animals. It is also associated with morbidity and mortality in pregnancy. Hence the need to determine the seroprevalence of antibody to toxoplasmosis gondii amongst pregnant women.

Methods: A cross-sectional study was carried out using patients attending the ante-natal clinic of Lagos State University Teaching Hospital Ikeja. All consenting newly registered antenatal patients were recruited consecutively into the study within a time frame of six weeks during which a total of 179 pregnant participants were obtained. Participants filled self administered questionnaires. Five milliliters of blood was collected from each participant after obtaining patient’s consent. Sera were assayed for antitoxoplasmosis IgG antibody by enzyme linked immunosorbent assay (ELISA.)

Results: A total of 179 pregnant women were studied. An assessment of patients’ status to anti-toxoplasmosis IgG showed 40.8% were positive while 59.2% were negative.

Conclusion: It appears that seroprevalence of toxoplasmosis IgG antibody amongst the pregnant women in this study population is high. Therefore, it is valuable to follow up the IgM—antibody status of their off springs which indicates recent exposure.

doi:10.1016/j.ijid.2010.02.2125

58.002
Atypical neuroimaging of neurocystercercosis
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Background: A 29 year-old Haitian-born woman, who moved to Chicago at the age of five, was brought to the emergency department (ED) by the local police, where she had a witnessed seizure. She was afebrile and physical exam was only remarkable for several tongue lacerations consistent with bite marks. MRI revealed three ring enhancing supratentorial cystic lesions. The largest was a 4.1 × 2.7 cm well circumscribed cyst centered within the subcortical white matter of the right posterior parietal lobe containing a fluid/fluid level with a small rim of circumferential edema.

doi:10.1016/j.ijid.2010.02.2124