

health interventions. Thus, the study aimed to determine the distribution of AIDS in Ceará, Brazil.

Methods It was an ecological and longitudinal study. It was analysed all individuals with aids, aged less than 13 years, residents in Ceará, Brazil, reported between 2001 and 2011 by the Information System Notification of the country. We carried out the distribution spatiotemporal cases where data were arranged in cartographic grid. From this, the main cases clusters were identified over the years. It was used ArcGis program.

Results The distribution of aids in the state during the study period allowed the identification of four significant clusters $p < 0.05$. The primary conglomerate ($p < 0.01$) was located in Fortaleza, the state capital, with 15,42 Km radius, covering surrounding municipalities, being an active cluster in each year. Three other side identified clusters ($p = 0.049$) were: Jijoca Jericoacoara; Groaíras, less than 1 km radius; municipalities of Limoeiro do Norte, Tabuleiro, Quixeré, São João do Jaguaribe and Russas, with radius of 36,8 km.

Conclusion The distribution of aids cases in Ceará does not occur randomly, but occurs in clusters over the years, suggesting studies to identify the determinants local features the largest number of cases.

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P16.15 CHILDREN AND YOUNG PEOPLE LIVING WITH HIV/AIDS IN A STATE OF NORTH-EASTERN BRAZIL

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Introduction With the advent of antiretroviral therapy there was a significant improvement in the quality of life of children and young people living with HIV/aids, allowing these patients reach adulthood. This public needs to live with the stigma and often with the lack of a structured household and better living conditions. As a consequence, they expose themselves to the risk of acquiring other diseases. This study aimed to describe the epidemiological profile of children and young people aged between 0 to 19 years, diagnosed with HIV/aids living in the state of Ceará in Brazil.

Methodology Data were collected from the Notifiable Diseases Information System (Sinan) from 2003 to 2012. For comparison between gender traits studied, it was used the odds ratio tests and chi-square with significant value or p-value < 0.05 .

Results A total of 10,284 people were diagnosed with HIV in Ceará during the period. Of this total, 4.62% were children and young adults up to 19 years. The sex ratio was 1.92: 1 with a predominance of males in the general population, while in the group studied the proportion was lower, being 1.04: 1. Girls with ages from 0 to five years (odds ratio: 0.5725; p -value = 0.0003), six to 12 years (odds ratio: 0.5281; $p = 0.002$) and 13 to 19 (Odds ratio: 0.5079; $p < 0.0001$) were more likely to be diagnosed with HIV than those of other ages.

Conclusion The male population is predominantly affected by HIV, however these proportions can vary depending on each age group, as girls and young women are more likely to be diagnosed with the virus. Thus, it is necessary the creation of public

policies for this audience and aimed at preventing infection by the virus.

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P16.16 ASPECTS RELATED TO THE QUALITY OF LIFE OF PATIENTS WHO USE ANTIRETROVIRAL THERAPY

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Introduction The antiretroviral therapy (ART), although is not a cure, allows the slow of the disease's course, while extending and promotes a better quality of life for the patient. Given that, the quality of health-related life is a concept that has as focus the subjective evaluation of the patient and is necessarily related to the impact of health status on the individual's ability to live fully, this study aimed to evaluate the satisfaction of the aspects related to quality of life in patients who use of ART.

Methods This is a cross-sectional study, with a descriptive character. The study included 215 patients who met the following inclusion criteria: in use of ART, age or over 18 years. The study met all legal and ethical issues.

Results Most participants were male (144; 66.98%) with a mean age of 40 years. The vast majority of respondents reported being satisfied or very satisfied: with sleep (127; 59%); the ability to perform activities of daily life (151; 70.23%), the ability to work (132; 61.40%).

Conclusion To conclude, antiretroviral therapy contributes to the improvement of personal satisfaction related to health parameter.

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P16.17 CORRELATION BETWEEN DEMOGRAPHICS, CLINICAL AND RISK FACTOR FOR HIV INFECTED WITH HIV/TB CO-INFECTED IN AMERTHA CLINIC KERTI PRAJA FOUNDATION BALI

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Introduction HIV infection increases the risk of developing Tuberculosis (TB), as TB infection increases the progression of HIV. In Indonesia, the rate of patients HIV positive with TB (HIV/TB co-infected) have reported 31.8% in 2013. In Bali HIV/TB co-infected patients have increased from 26% in 2012 to 30% in 2013. This study aims to determine the correlation between demographics, clinical and risk factor for HIV infected with HIV/TB co-infected in Amertha Clinic Kerti Praja Foundation Bali.

Methods A cross-sectional study using secondary data of patients with HIV/AIDS who were receiving antiretroviral therapy (ART) from 2002–2012. Independent variables were demographics: sex, age, education level, occupation, and presence of ART supervisor; clinical: haemoglobin count, weight, and CD4 count; and risk factor for HIV infected. The status of HIV/TB co-infection was the dependent variable. All variables are conditions of patients when starting receiving ART. Data was analysed using univariate, bivariate (chi-square) and multivariate (cox regression).

Results From the 531 patients, the majority were male (57,6%), aged ≥ 31 years (50,8%), and starting ART with median CD4 count 130 (IQR = 40–224) cell/mm³. We found 5,5% of patients experienced HIV/TB co-infection. In multivariate analysis, the variables was correlated with HIV/TB co-infection were a CD4 count at baseline ≤ 200 cell/mm³ (PR = 10,34; 95% CI = 1,39–76,69) and patients with a history of injecting drugs compared to patients reporting heterosexual contact (PR = 3,27; 95% CI = 1,56–6,88).

Conclusion Patients with CD4 count ≤ 200 cell/mm³ and patients with a history of injecting drugs have correlating with HIV/TB co-infection. These data support national recommendations encouraging early initiation ART when CD4 counts is higher. These data also suggests that promote awareness and monitoring patients with low CD4 count and who have a history injecting drugs for the presence of HIV/TB co-infection, particularly in those patients whose sputum smear examination or radiology was negative for TB.

Disclosure of interest statement None.

P16.18 INFLUENCE OF BASELINE CHARACTERISTICS ON THE INCREASE CD4 >350 CELLS/MM³ AMONG HIV/AIDS PATIENTS RECEIVING ANTIRETROVIRAL THERAPY IN INDONESIA

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Background The use of antiretroviral (ARV) therapy has reduced mortality and morbidity globally among people living with HIV. We sought to assess patient's characteristics at the commencement of ARV therapy and their association with increased CD4 count following initiation of treatment with ARV.

Methods A retrospective cohort study of medical records patients who had receiving ARV therapy between 2002 and 2012 at Kerti Praja Foundation in Bali. We included all patients >15 years old with CD4 at start of treatment of ≤ 350 cells/mm³ and at least one follow-up CD4 test result. Variables included in the analyses were; sex, age, education, occupation, risk behaviours, opportunistic Infection, supervision of ART, CD4 count, body weight, and haemoglobin level also starting dates ARV therapy. Kaplan Meier and univariate and multivariate Cox proportional Hazard Model were used to assess predictors of achieving a CD4 count >350 cells/mm³. Patients were followed up to time of reaching CD4 >350 cells or to date of death or last clinic visit.

Result From the 311 patients, we found 46% had a CD4 count that increased to above 350 cell/mm³. Median time to achieving

this end point was 1.4 years (IQR = 0.7–3.0). In multivariate analysis, a CD4 count at baseline above 200 cells/mm³ was associated with achieving the end point (HR = 3.83; 95% CI = 2.59–5.68). Patients with a history of injecting drugs were significantly less likely to achieve the endpoint compared to patients reporting heterosexual contact (HR = 0.54; 95% CI = 0.36–0.82).

Conclusion Patients with CD4 count >200 cell/mm³ and without a history of injecting drugs were more likely to achieve a CD4 count >350 cell/mm³. Our findings demonstrate the benefit of starting HIV treatment earlier when CD4 counts is higher and support national recommendations encouraging early initiation ARV therapy. These data also suggests that close attention and further assessment are needed for patients starting ART who have a history of injecting drugs.

Disclosure of interest statement None.

P16.19 NASAL COLONISATION WITH STAPHYLOCOCCUS AUREUS IN PEOPLE LIVING WITH HIV/AIDS AFTER SEVEN DAYS OF HOSPITALISATION

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Introduction Staphylococcus aureus has been appointed as one of the most agent cause nosocomial infection. There are evidences showing that many infections are preceded by one or more sites colonised by microorganisms.

In the era of HAART, people living with HIV/aids require less hospitalisation processes. However, in many cases it is necessary and hospital environment can be a further injury for their condition, because of their greater vulnerability to nosocomial microorganisms. The study aims to identify the presence of nasal colonisation by Staphylococcus aureus in people living with HIV/AIDS after seven days of hospitalisation.

Methods It's a cross-sectional study undertaken in two units specialised in attending people living with HIV/AIDS, in the period of August-2011 – October 2012. Socio-demographic and clinical data collected through individual interviews and from the medical records. Samples of nasal secretion were collected with Stuart swabs on the hospital admission and seven days after hospitalisation. All ethical aspects were respected.

Results Of the 227 people living with HIV/AIDS that hospitalised in this period, 33 (14.5%) identified with nasal colonisation with Staphylococcus aureus. Of these, 10 (24.9%) showed no nasal colonisation with Staphylococcus aureus on the first day of hospitalisation. In addition, 6 (60%) identified oxacillin resistance cepa.

Conclusion Thirty three (14,5%) people living with HIV/AIDS were identified Staphylococcus aureus after seven days of hospitalisation. These results allow contributing to more investigations and implementation of measures to prevent and control this pathogen in this population.

The authors make manuscript entitled "Nasal Colonisation with Staphylococcus aureus in people living with HIV/AIDS after seven days of hospitalisation" in conflicts of interest none on article gift.

Disclosure of interest None.