

P2248 The incidence and prevalence of serious fungal infections in ParaguayGloria Aguilar¹, David W. Denning^{*2}, Gladys Estigarribia, Carmen Fernandez³¹ Universidad Nacional de Caaguazu, ² University Hospital of South Manchester, United Kingdom, ³ Board Members IDP Interest Group EAACI

Background: Paraguay is home to several endemic fungal diseases as well as modest numbers of HIV positive people, TB cases and many adults with asthma. The burden of fungal diseases in Paraguay has yet to be estimated.

Materials/methods: Data on specific populations were obtained from national and international data registries. Prevalence of certain fungal disease was calculated based on epidemiological studies from the region or country. These estimates were informed by our clinical experience in this relatively small country.

Results: In 2017, the population of Paraguay was 6,953,646 (50% female) and 2,086,093 (30%) were younger than 15 years. The overall burden of fungal infections was 134,207 (1,930/100 000). The majority of the cases with serious fungal infections were recurrent *Candida* vulvovaginitis. Assuming a 6% rate of the disease, CCC women were infected with *Candida* spp. (3,145 /100 000 women).

Prevalence of allergic bronchopulmonary aspergillosis (ABPA) and severe asthma with fungal sensitisation (SAFS), were estimated to be 7,788 and 10,280, respectively. Similarly, chronic pulmonary aspergillosis (CPA) was estimated to follow tuberculosis in 428 patients based on 2016 data, probably 50% of the total (856).

The number of candidemia cases in Paraguay is unknown, so conservatively estimated at 5/100,000 (348 cases) and invasive aspergillosis at 560cases (8/100,000) , In AIDS, cryptococcal meningitis cases were based on Rajasingham et al (2017) and disseminated histoplasmosis in 49 cases based on Adenis et al, 2018. *Pneumocystis jirovecii* cases in AIDS are thought to number 29 annually. Fungal keratitis accounts for 50-65% of microbial keratitis cases, but the total number is not known. No estimates were possible for mucormycosis, chromoblastomycosis, sporotrichosis or mycetoma, although all are present in Paraguay.

Conclusions: The present study shows that the burden of serious fungal infections in Paraguay is high and affects 2% of the population. The morbidity, mortality and the health-care related costs due to fungal infections warrant further studies.

