Application for the Gerry Murphy Prize

Title: Syphilis infections within a mental health inpatient population in Central Australia

Author name: Felix Ho

Author address: Public Health Division, NT Health, PO Box 40596, Casuarina, NT 0811

Background: Syphilis, a sexually transmissible infection (STI), has emerged as a significant public health concern in the Northern Territory (NT) of Australia. In the NT, syphilis rates have surged, with the region experiencing an ongoing outbreak since 2011. Mental health patients are particularly vulnerable due to intersecting risk factors, including substance use, homelessness, and engagement in disinhibited or risk taking behaviours. Mental health patients face unique challenges related to syphilis, including delayed diagnosis, stigma, and barriers to accessing care. 26.3% of the NT population identify as Aboriginal and / or Torres Strait Islander; with a greater percentage in Central Australia.

Early detection and management are crucial to prevent complications, including neurosyphilis affecting the central nervous system and can mimic psychiatric behaviour. This review examines the prevalence of syphilis on mental health patients within the NT, with particular focus on Central Australia.

Methodology: 642 cases over a six month period from Central Australia were reviewed and results audited for syphilis screening investigations and follow up treatment. Data were analysed using Microsoft Excel and Stata 17 software, involving statistical analysis (descriptive data analysis) and diagnostic analysis. This study was approved by the Menzies School of Health Research Human Research Ethics Committee.

Results: Of the 642 cases, approximately 2% of the cases were found to have syphilis serology which required further follow up. Concerningly, 30% of all cases had no primary care provider listed.

Discussion / conclusion: Syphilis continues to be a significant issue within the Northern Territory. The lack of primary health care providers for Territorians suffering with mental health illness is an equally concerning public health issue. Proactive screening of syphilis at first patient contact, and linking with primary health care providers including Aboriginal Community Controlled Health Organisations is vital.