

ABSTRACT

THE PREVALENCE OF GENITAL CHLAMYDIAL INFECTION IN THE JAMAICAN POPULATION

Gwendolyn Dowe

Genital chlamydial infection has evolved as the leading sexually transmitted disease, both in the developed and the developing countries. The impact of genital chlamydial infection as a public health problem in the Caribbean is probably as high as in industrialized countries. Accurate statistics are therefore needed to obtain knowledge of the epidemiology of this disease.

A prevalence study was carried out in Jamaica on persons attending different health facilities and locations. This was to ascertain the prevalence of chlamydial antibodies and of chlamydial infection in these selected populations.

Microbiological methodologies employed were the Microimmunofluorescent Technique (MIF) for detecting antichlamydial antibodies, the Direct immunofluorescent test (DFA) for detecting chlamydia antigens in specimens, and also isolation of *C. trachomatis* by culture in McCoy cells.

A total of 1228 sera were tested for antichlamydial antibody resulting in the following seroprevalence rates. prostitutes -95.3%, gynaecology patients -60.0%, family planning clinic attendees -59.8%, blood donors -52.6%, sexually transmitted diseases (STD) clinic patients - 70.1%, pregnant women - 51.0% and students attending tertiary institutions - 25.0%. The 95.3% seroprevalence rate observed in prostitutes was significantly higher than that found in the other groups.

From 1641 patients, specimens including urethral, endocervical, conjunctival and nasal swabs were cultured for *C. trachomatis*. The organism was isolated from 18.5% to 59.3% in this study group; in pregnant women 18.5% (n = 200), neonates 24.0% (n = 100), prostitutes 24.8% (n = 129), student 33.9% (n = 103), family planning clinic attendees 34.0% (n = 238), gynaecology patients 45.8% (n = 170) and STD patients 59.3% (n = 701).

The seroprevalence of *C. trachomatis* is high in the Jamaican population, although the rate of infection was found to be much lower.

A wide cross-section of the Jamaican population in different age groups from different strata of the society and having different behavioural patterns was found to be

infected with *C. trachomatis*. The prevalence of *C. trachomatis* infection was not influenced significantly by demographic factors or socioeconomic status, since both chlamydial antibody and *C. trachomatis* were demonstrated in all age groups and in individuals from different strata of the society with different behavioral patterns.

These findings demonstrated that genital chlamydial infections are highly prevalent in Jamaica and should be regarded as a public-health problem. Prevention and control strategies should be implemented in order to prevent spread of the disease.