CHAPTER I

BACKGROUND AND RATIONALE

Vaginitis infections are among the most common problems that challenge the gynecologist (Friedrich E.G.Jr., 1985).

In the recent past, the problem of vaginitis has all too often been ignored by the medical community or regarded merely as a minor annoyance to women (Howard L. Kent, 1991).

As a matter of fact, some infections are extremely common (e.g., Trichomonas vaginalis, Candida albicans ...), the frequency and the importance of them have been recognized only in recent years (Sobel J.D., 1985), (Howard W.Jones III, 1988).

These infections are often difficult to eradicate and are frequently recurrent because a large percentage of these women are asymptomatic (McLellan R., Spence M.R., Brockman M., Raffel L., Smith J.L., 1982), and only a small proportion have symptoms sufficiently troublesome to seek medical relief (Howard W. Jones III, 1988).

However, through sexual contact, asymptomatic women also act as source of infection for their sexual partners. The

organism may be transmitted from an asymptomatic person to another individual who may develop a symptomatic infection. So it may spread to the population, and becomes a difficult social problem. Symptoms may also appear at any time in the previously asymptomatic host.

In addition, it is a cause of early neonatal sepsis. Babies can be infected during passage through the birth canal leading to conjunctivitis and occasionally life-threatening (e.g., pneumonia, meningitis). Moreover, there are studies that have found that vaginal infection has been associated with infertility (Tuttle J.P., Holbrook T.W., Derrick F.C., 1977), endometritis, pelvic inflammatory disease, chorioamnionitis (Sebastian Faro, 1991), and cervical erosion, the latter possibly predisposing to malignant transformation (Rein M.F., Chapel T.A., 1968). Its documented role necessitates treatment even in the asymptomatic host. Prevalence figures are only available from a limited number of surveys compiled from data from sexually transmitted disease (S.T.D.) clinics and from tertiary hospitals, not from the inception population.

It has been known that the three common clinical entities of candidiasis, trichomoniasis, and bacterial vaginosis account for over 90% of the cases of vaginitis (Sobel J.D., 1990). It also has been recognized that the vaginal epithelial state, under the control of estrogens,

changes greatly in different phases of life, and therefore the vagina is susceptible to infection by different potential pathogens at different age periods (Carol A. Spiegel, 1989), (Table 1).

Newborn	6 week	Puberty	Childbearing age	Menopause
Yeast	N.gonorrheoea	Yeast		N.gonorrheoea
	C.trachomatis	Trichomonas vaginalis		C.trachomatis
		Bacteria		. . .

Table 1. Changes in potential pathogens with Changes in Estrogen Status.

Because of those reasons mentioned above and with the view to research the prevalence, common infective agents of vaginal infections among sexually active childbearing age females, this study was done with a prime interest in these three common infections (i.e., bacterial vaginosis, candidiasis, and trichomoniasis) in the inception population.

The Phuoc Hiep community (P.H.), like many communities in less developed countries, the life style of the population is still backward level. P.H. is a new inhabitant region and has an indigent population, with 1016 females in the age of 15-49. The majority of the inhabitants are farmers, with the thatched houses. The transportation is quite difficult because of the muddy lanes, and the principal transportation means for P.H. inhabitants are bicycles or by foot. P.H. has

just built the regional health care center for two years, with 3 practical health workers. Apart from these characteristics, only in the premise of the health care center has tab water, the rest of the community has an access to wells, ponds, and lake within the vicinity of the community.

It is recommended that fundamental research is worthwhile to be done for assessing the magnitude of the problem on the health of the inception population. It also will be the first step in developing priorities for health care programmes.

This study was therefore designed to establish the prevalence of three common pathogens in women with or without symptoms and/or signs suggestive of genital infection and to identify the associated factors of vaginal infections among sexually active childbearing age females in P.H. community. As a result, treatments, support and counseling were provided, that may benefit most from the screening of infections caused by vaginal microorganisms.

The result of this study may be used as a tool to aid the planning of a health care system, and it also may be used to help determine the priorities for the allocation of resources to alternative health improvement procedures.

RESEARCH QUESTIONS:

Primary Research Question :

What is the prevalence of common infective agents of vaginal infections with the interest in the three common infections (i.e., bacterial vaginosis, candidiasis, and trichomoniasis) among sexually active childbearing age females in Phuoc Hiep (PH) community, Cu Chi (CC) district?

Secondary Research Question :

What are the associated factors of vaginal infections among sexually active childbearing age females in Phuoc Hiep (PH) community, Cu Chi (CC) district ?

OBJECTIVES:

The purposes of this research are two-fold: namely, to find out the prevalence of common infective agents of vaginal infections with an interest in the three common infections (i.e., bacterial vaginosis, candidiasis, and trichomoniasis), and to explore the associated factors of vaginal infections among sexually active childbearing age females in Phuoc Hiep (P.H.) community, Cu Chi (C.C.) district.