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Prevalence of Lower Genital Tract Infections among Khmer Women of Reproductive Age in Can Tho City, Vietnam

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Keywords

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Introduction

Lower Genital Tract Infections (LGTIs) in women are important issues of reproductive health care in the community, especially in developing countries, including Vietnam [1,2].

LGTIs are directly related to several reproductive health issues, such as miscarriage, premature birth [3], neonatal infection, low birth weight [4], and cervix lesions [5]. Anatomical characteristics of women's genitalia and physiological characteristics make it more likely to lead to gynecological infections, which significantly affect women's health and spirit [6]. Therefore, LGTIs are important health issues that need to be concerned, monitoring and improved, especially in areas with a high prevalence of LGTIs.

Existing studies reported the prevalence of LGTIs in Vietnam to be widely ranging from 20% to 70% between regions [2,7,8]. According to CDC (2003), the incidence and prevalence of various Reproductive Tract Infections (RTIs) vary greatly between countries and even between regions within a country. However, the epidemiological data suggest that RTIs are common in almost all of the developing countries in which they have been investigated [9].

Khmer community is a minority ethnics population that mainly stays in Southern Vietnam. Due to different living habits, personal hygiene, and environmental conditions, Khmer women have weak awareness of those diseases, along with their limited rate of access to education and knowledge. They also have psychological concerns in having the gynecological examination as well as attempt to ignore symptoms [10]. Moreover, in many cases, LGTIs patients were undiagnosed since the signs and symptoms of LGTIs are not notable and specific [11]. Therefore, data on the prevalence of LGTIs of the Khmer women population are very limited.

To fill in the gap, we carried out the study to determine the prevalence of LGTIs in reproductive age among Khmer women, clinical forms, and related factors. A total of 830 Khmer women was recruited to participate in the study, was performed clinical examinations and subclinical testings. Survey data collected plays an important role in providing the scientific basis for the reproductive health care of Khmer women in Vietnam.

Methodology

A community-based, cross-sectional survey was conducted among 830 Khmer women of reproductive age in Can Tho city. All participants were interviewed, followed by gynecological examination and laboratory tests.

Results

The average age of participants was 38.05. Of these, women of the age group <20 accounted for the lowest proportion (0.8%), followed by the 20 to 29 years-old group with 174 people (21.0%), the 30 to 39 years-old group with 320 people (38.6%). There were 329 people aged ≥ 40, accounted for

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the highest rate (39.6%). The main occupation of the participants in the study was farmer, accounted for 65.0%. The others were at low rate.

According to statistical results of clinical examinations, 477 Khmer women accounted for 57.5%, diagnosed with lower genital tract infections. Women in the age group of above 40 accounted for the highest rate (70.5%) of LGTIs compared to other age groups. The difference was statistically significant ($p<0.05$).

There were 281 out of 830 (33.9%) women diagnosed with cervicitis, accounted for 58.9% of the total of 477 cases of LGTIs. Vaginitis cases had 186 out of 830 cases in total (22.4%), accounted for 38.9% of 477 cases of LGTIs. Besides, 10/830 cases (1.2%) were diagnosed with vulvitis, accounted for 2.1% of 477 cases of LGTIs.

Study on 4 age groups showed that the prevalence of vulvitis was 100.0% in women under 20 years old. The women of sexually active age had a relatively high rate of cervicitis. The prevalence of cervicitis changed with age. Accordingly, the survey at age groups 20 to 29 years old and 30 to 39 years old indicated a relatively high rate of cervicitis ($p<0.05$) among those groups. Besides, the rate of vaginal infections and vaginitis was higher with age increase.

There was a relationship between residence and the prevalence of LGTIs ($p<0.05$). In which, the group of LGTIs living in the rural areas accounted for the highest proportion with 76.1%. Besides, there was also a low prevalence of LGTIs in women living in urban areas (8.1%) and on boats and riverside areas (15.7%).

Among 477 Khmer women whose clinical examination showed manifestations of LGTIs, the high rates of cervicitis among women living on boats and riverside areas (84.0%) had a statistically significant difference ($p<0.05$) in comparison with rural and urban areas. Besides, the rate of vaginitis was lowest in this group (12.0%).

There was a relationship between occupation and the prevalence of LGTIs ($p<0.05$). Women diagnosed with LGTIs that worked as farmers accounted for the highest proportion with 68.9%. Besides, there was also a low prevalence of LGTIs in women who were petty traders (8.6%), housewives (8.2%), employees/workers (6.1%), and others (8.2%). This difference has statistical significance with $p<0.05$.

Conclusion

There were 477 in the total of 830 Khmer women, accounted for 57.5%, diagnosed with lower genital tract infections. In which the age group of above 41 had the highest prevalence of LGTIs (70.5%). Cervicitis accounted for 58.9% of 477 cases of LGTIs. The rate of cervicitis among Khmer women living in rural areas was highest, with 84.0%. The group of LGTIs that occupation was farmer had the highest proportion with 68.9%.

There was a statistically significant association between the prevalence of LGTIs as well as their clinical forms and age, residence, and occupation of Khmer women of reproductive age in Can Tho city, Vietnam ($p<0.05$).

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