

English abstract for paper

Screening for Vulvovaginal Candidiasis of Pregnant Women and Effectiveness of Learning Package on the Knowledge and Clinical Feature in Egypt

Background: Vulvovaginal candidiasis (VVC) is a common problem during pregnancy that threat to the well-being of the mother and baby; early detection and health teaching is thus very important. The aims of the current study were: 1) to screen pregnant women for prevalence of VVC 2) to evaluate the effect of a learning package on the knowledge and clinical features of VVC. **Methods:** a quasi-experimental design one group "pre/post-test" was utilized. Purposive sampling technique was used to select 300 pregnant women suffering from abnormal vaginal discharge were recruited. Three tools were utilized to collect data; Structured Interview Schedule, VVC knowledge pre-post-test follow up tool, and Laboratory and Bacteriology investigations sheet. **Results.** This study revealed the prevalence of Vulvovaginal candidiasis among the total pregnant women was 49%. The total mean of knowledge score was 12.21 ± 3.2 in the pretest as compared to 24.9 ± 4.1 in posttest, and three weeks follow up with a mean of 38.20 ± 4.3 with high statistical significant differences ($P = 0.001$) in posttest, which indicated an improvement in knowledge level and in the clinical features of VVC three weeks of follow up visits among the pregnant diagnosed VVC after receiving the education program. **Conclusion:** There is a high prevalence of VVC among pregnant women and the educational program has positive effect on knowledge as well as decreased the clinical feature of VVC with a highly statistically significant difference. **Recommendations:** Educational intervention and Screening protocol for early diagnosis are beneficial in treatment and prevention of VVC during pregnancy.

Key words: Vaginal Candidiasis, Prevalence, pregnancy, Learning Package

توقيع مقدم البحث

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English summary for paper (5)

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Introduction: Pregnancy is a physiological state, which produces several normal and expected changes in all the maternal organ systems. The change in pH also unfortunately, favors the growth of *Candida albicans*. *Candida* infection occurs more frequently in pregnant women. It is believed that higher estrogen levels and higher glycogen content in vaginal secretions during pregnancy increase a woman at risk of developing vulvo-vaginal candidiasis because higher glycogen content in vaginal secretions which acts as a nutrient for *Candida* organisms(4,5) Moreover VVC is more likely caused due to exogenously by vaginal unhygienic practices as poor personal hygiene such as keeping the genital area moist, using contaminated towels, and using irritating and tight nonabsorbent underwear(6).It can result in discharge, itching and pain and is often associated with an irritation or infection of the vulva.

Aim of the study:

- to screen pregnant women for prevalence of VVC
- To evaluate the effect of a learning package on the knowledge and clinical features of VVC

Subjects and Methods:

A quasi-experimental **design** was used. **Setting:** was the Out Patient Antenatal Clinic at El Manial University Hospital. A purposive **sampling** with a total of 300 pregnant women were recruited based on the following inclusion criteria: suffering from abnormal vaginal discharge, during the first or second trimester of pregnancy, whether primiparous or multiparous, not using any vaginal suppositories or douche, no sexual -intercourse for at least the last 48 hours, not using antibiotics at least the last seven days and free from diabetes, chronic dermatitis in perineum or chronic disease. The sample size of 300 was calculated using power analysis, a power of 0.95($\beta = 1-.95 = 0.05$) at alpha .05 (one-sided) with medium effect size (0.3) was used as the significance level. Although the minimum sample size required for the study was 270 subjects. The 300 pregnant were actually recruited because ten percent of non-response rate was expected.

Data collection tools:

Tool 1: Structured Interview Schedule; It included data related to socio-demographic characteristics, Obstetric history, Personal hygiene and habits

Tool II. VVC knowledge pre-post/test follow up tool

Tool III. Laboratory and Bacteriology Investigations sheet

Results:

- This study revealed the prevalence of Vulvovaginal candidiasis among the total pregnant women was 49%.
- The total mean of knowledge score was 12.21 ± 3.2 in the pretest as compared to 24.9 ± 4.1 in posttest.
- and three weeks follow up with a mean of 38.20 ± 4.3 with high statistical significant differences ($P=0.001$) in posttest, which indicated an improvement in knowledge level and in the clinical features of VVC three weeks of follow up visits among the pregnant diagnosed VVC after receiving the education program.

Conclusion:

Based on the findings of the current study, it can be concluded that near half of the pregnant women (49%) had Vulvovaginal Candidiasis and women have a lack of knowledge regarding VVC and improvement which was occurred in knowledge level after the educational program with statistically significant differences. Moreover, nursing intervention can increase the cure rate and relieved symptoms of VVC with a highly statistically significant difference (negative vaginal swab).

Recommendation:

- Screening protocol incorporation with routine antenatal follow up for early diagnosis and treatment of candidiasis during pregnancy is recommended to reduce the long term health complications associated with VVC during pregnancy.
- Educational intervention is beneficial in treatment and prevention of VVC during pregnancy

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