

## *Prevalence of Bacterial Vaginosis, Vulvovaginal Candidiasis and Trichomoniasis among patients visiting tertiary care hospital, Nepal*



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### **Abstract:**

**Introduction:** Bacterial Vaginosis is the polymicrobial syndrome associated with depletion of normal Lactobacilli and overgrowth of other anaerobic bacteria such as Gardnerella vaginalis, Mobiluncus species, Bacteroides species etc. Bacterial vaginitis is the inflammation of vaginal epithelium and antimicrobial therapy is generally indicated in such condition. This study was intended to determine the bacterial vaginosis by using the gold standard methods i.e. Nugent scoring. This study also determines the prevalence of Vulvovaginal Candidiasis and Trichomoniasis. Prevalence of Bacterial Vaginosis, Vulvovaginal Candidiasis and Trichomoniasis among patients visiting tertiary care hospital, Nepal

**Methods:** This descriptive cross-sectional study carried out in Manmohan Memorial Community Hospital and Manmohan Memorial Teaching Hospital. A total of 280 High Vaginal Swabs were collected. Gram stain, determination of pH, whiff test and cultured was done from HVS and the isolated

organism from culture was processed for Antibiotic Susceptibility Testing. Comparison of Amsel criteria with Nugent criteria was done. Candida CHROM agar was used for isolation of candida species. Wet mount preparation was done to determine the Trichomonas vaginalis.

**Results:** Out of 280 HVS, Gram stain was prepared from all sample and scoring according to Nugent criteria. Among them 130(46.4%) were BV with Nugent range 7 to 10, 76(27.2%) were intermediate BV with Nugent range 4 to 6 And 74(26.4%) were no BV having Nugent range 0 to 3. Prevalence of vulvovaginal candidiasis and Trichomoniasis was

5.7% and 7.9% respectively. Increasing age group, menstrual history, Vulvular itching/irritation, lower abdominal tenderness is associated with bacterial vaginosis. Gram-negative bacteria were the major cause of bacterial vaginitis especially Escherichia coli followed by Gram positive bacteria i.e. Staphylococcus aureus.

**Conclusion:** Amsel criteria is also a suitable methods for diagnosis of bacterial vaginosis in the rural areas in where proper electricity is not supply. Prevalence of bacterial vaginosis (According to Nugent scoring) was 46.42% which was found predominant in female in age-group of 31-40 years. Prevalence of vulvovaginal candidiasis showed 5.7% and Prevalence of Trichomonas vaginalis was 7.9%.

**Keywords:** Bacterial Vaginosis, Nugent scoring, Candidiasis, Trichomoniasis



### **Biography:**

Shivahari Ghimire has completed his BSc.MLT at the age 23 years from Manmohan Memorial Institute Of

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