A Syndromic Approach to Identify Cases of Vaginal Discharge in Females of central India

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Abstract
Background: Vaginal discharge is a common symptom of Pelvic inflammatory disease among women. Studies have shown that of women seeking care in the primary and secondary health care setting, 11% to 38.4% in India, and 34% in Ethiopia were availing care for vaginal discharge[2-6]. The prevalence in India is 24-32 %, 7% - 22% of PID is associated with HIV infection.

Methodology: This study was a Cross-sectional Study carried over a period of 3 months (Aug-Sept2017). The study participants were 150 females between 15-45 years residing in a randomly selected urban slum of the city.

Result: Maximum (23%) participants were of age group 20-24 years, followed by 18.8% 25-29 years while 9% of the participants were of age group 15-19 years. Out of 150 participants 89 had no discharge history while had history of vaginal discharge. Out of this 61 participants 33 (54%) were suffering with vaginal discharge problem always and 7 had rare episodes of vaginal discharge. Mucoid Consistency (66.7%) was the most common type amongst the type of discharge followed by watery discharge (11.33%).

Conclusion: In our study, we identified that socioeconomic status was one of the most important factors affecting the occurrence of Vaginal Discharge. Educational status of the female alone is comparatively less significant.

Introduction
Pelvic inflammatory disease (PID) is a collective term that includes acute, sub acute and chronic infection of uterus, fallopian tubes, ovaries connective tissue and peritoneum(1). The various Risk factors for pelvic inflammatory disease are 1.Sexually active women in their childbearing years, 2. Multiple sexual partners, 3.Use of intrauterine device, 4.Poor Personal hygiene, and 5.Women with sexual partner having multiple sexual partners. Various Signs and Symptoms of pelvic inflammatory disease are Lower abdominal pain, Fever, Vaginal & Cervical discharge with foul odour, Painful urination, Irregular menstrual bleeding, Pain in the right upper abdomen, General weakness. Permanent damage of female reproductive organs, Women become infertile, Ectopic pregnancy (causing rupture of fallopian
tube, severe pain, internal bleeding and even death) are the complication that appear if Pelvic inflammatory disease remains untreated or partially treated. Vaginal discharge is a common symptom of Pelvic inflammatory disease among women. Studies have shown that of women seeking care in the primary and secondary health care setting, 11% to 38.4% in India, and 34% in Ethiopia were availing care for vaginal discharge\textsuperscript{[2-6]}. The prevalence in India is 24-32 %, 7% - 22% of PID is associated with HIV infection. Diagnosis of various Pelvic inflammatory diseases usually based on clinical findings or direct visualisation of the fallopian tubes by laparoscopy is the best single diagnostic test, but it is invasive, lacks sensitivity, and is not used routinely in clinical practice\textsuperscript{(7)}. If symptoms such as lower abdominal pain are present, a health care provider should perform a physical examination to determine the nature and location of the pain and check for fever, abnormal vaginal or cervical discharge, and for evidence of gonorrheal or chlamydial infection\textsuperscript{(8)}. This study was planned to identify cases of vaginal discharge by a door to door survey in slums among 150 females of 15-45 yrs.

**Objectives**

To identify cases of Vaginal Discharge in slum area of city & to provide treatment to them following a syndromic approach.

**Methodology**

This study was a Cross-sectional Study carried over a period of 3 months (Aug-Sept2017). The study participants were 150 females between 15-45 years residing in a randomly selected urban slum of the city. The Inclusion criteria were females of 15-45 years living in selected area with complaints of vaginal discharge. Those who were not willing to participate in study and those who were already on medication were excluded from the study. A Door to door survey was conducted in urban slum in 150 females. Study was conducted using predesigned and pretested proforma following a syndromic-approach for detection of vaginal discharge. During the survey educate all females on personal hygiene & Educational intervention for partner on personal hygiene. For gynaecological examination help of obgy department was taken.

**Results**

A total of 150 participants were recruited for the study. Maximum (23%) participants were of age group 20-24 years, followed by 18.8% 25-29 years while 9% of the participants were of age group 15-19 years. About 30% of study participants were educated till high school while 13% were illiterate and 8% were primary educated. Out 150 study participants 132 (80.6%) were married. Only 27.00% used some form of intrauterine contraceptive device while the rest used barrier contraceptives, had a tubectomy or used no contraception. Usage of sanitary pad was found to be 82% of study participants. The most common complain of study participants was of generalized weakness (56%) and then lower abdominal pain (44%) during menses, 8% had complain of burning during micturation while 6% had difficulty in micturation. Fever was presenting complain of about 13% of study participants. Out of 150 participants 89 had no discharge history while had history of vaginal discharge. Out of this 61 participants 33 (54%) were suffering with vaginal discharge problem always and 7 had rare episodes of vaginal discharge. Mucoid Consistency (66.7%) was the most common type amongst the type of discharge followed by watery discharge (11.33%). Cervicitis was the most common diagnosis followed by vaginitis and lower abdominal pain. As Cervicitis was the most common diagnosis followed by vaginitis kit 1 and 2 were given the most in first timers while lower abdominal pain was diagnosed in recurrent cases and were given Kit 6. There was a strong correlation between the socio economic status and the occurrence of vaginal discharge in which Upper Lower accounts for 47%. There was a 16%...
less occurrence of Vaginal Discharge amongst those using sanitary napkins.

**Conclusion**
In our study, we identified that socioeconomic status was one of the most important factors affecting the occurrence of Vaginal Discharge. Educational status of the female alone is comparatively less significant.

**Limitations**
Small Sample size, Lack of confidentiality anonymity and privacy, Under reporting of sexual risk behavior, Validity of self reported behaviors among women, Cross sectional nature of study limits us to the temporality of only the association of vaginal discharge with other STI’s.

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