

## **Effectiveness of Via and Vili as A Screening Tool for Cervical Intra Epithelial Neoplasia between Tertiary and Primary Health Care Levels**

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### **Abstract:**

**Back ground:** Cancer cervix is a leading cause of mortality and morbidity among women. Many studies have proved that via and vili has sensitivity comparable to papsmear not only in a resource poor setting but in a well equipped centre also. Present study compares the effectiveness of via-vili done in two centers with low resource setting.

**AIM:** To compare the efficacy of our via-vili test with other centers test.

**Methodology:** During 1 year, 5285 women have undergone via-vili screening test at our hospital. Only 430 were positive. Same period 778 via-vili positive cases were referred from surrounding PHCs for further management. The two groups were confirmed Colposcopy and biopsy. Results were compared between two groups. Data were analyzed and interpreted by 'Z' test of proportions at 5% significance.

**Results:** TKMCH, out of 430, Colposcopy positive was 262 (60.9%) and among Colposcopy positive 35 (13.4%) were biopsy positive. Among 778 referred positive cases Colposcopy positive was 318(40.8%) and biopsy positive was 28 (8.8%). The confirmation of via-vili by Colposcopy was statistically significant (Z=6.802 and  $P<0.001$ ). But confirmation of Colposcopy positive by biopsy was not statistically significant (Z=1.745 and  $P>0.05$ ).

**Discussion:** The confirmatory Colposcopy positive 60.9% of our hospital was significantly greater than the referred confirmatory 40.9%. It shows that our via-vili test was stringent and effective than the referred. The biopsy confirmations (13.4% and 8.8%) were not statistically significant since it was performed at our hospital.

**Conclusion:** The statistically significant difference in via-vili outcome between rural and urban population needs further detailed study. The via-vili screening test may be improved at primary health centers still more to minimize the expenditures of Govt. as well as individuals.

**Key Words:** Via-vili screening test, Efficacy, Comparison, Confirmation, Colposcopy, Biopsy,

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### **I. Introduction**

Cancer Cervix is the leading cause of mortality and morbidity in women. Second most common cancer among women world wide. Nearly 5 lac new cases per year,  $\frac{3}{4}$  of the world burden occur in developing countries. Most common cancer among women in developing countries. Most common cause of death among middle aged women.

Prevention and screening of cervical cancer is of paramount importance.

If detected early and treated optimally, would result in a very high cure rate.

Various studies have proved that via-vili is effective in identifying pre cancerous lesions and even more effective, when clubbed with colposcopy.

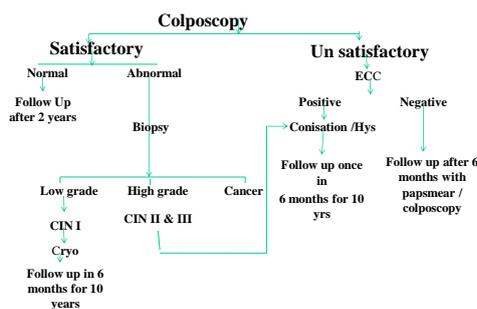
This study compares the effectiveness of VIA and VILI (visual inspection after acetic acid and visual inspection after lugol's iodine) as a screening tool for CIN between Tertiary and Primary health care levels.

### **II. Materials and Methods**

During a period of one year from June 2013 to May 2014, 5285 women between the age group of 30 – 60yrs were screened by via-vili by trained staff nurses in medical college hospital.

430 Via/Vili Positive cases were subjected to colposcopy by trained doctors. 778 via vili positive referral cases from periphery were also subjected to same procedure. Pregnant women, puerperal women, those undergone hysterectomy, H/o Cervical cancer were excluded.

Via positive : Well demarcated acetowhite area in transformation zone.  
 Vili positive : Bright yellow / mustard area in the TZ which does not take iodine stain.



### III. Results

Results were compared between the two groups. Data were analysed and interpreted by ‘Z’ test of proportions at 5% significance

#### TERTIARY HOSPITAL

Period	Via/vili Positive	Colposcopy	Outcome									
			Sat & N	Sat & AB	Un Sat	Biopsy	Ch-cervicitis	CIN I	CIN II	CIN III	Cancer Cervix	Others
June 2013 to May 2014	430	430	168	253	9	262	219	12	3	4	16	8

#### PRIMARY HEALTH CENTRES

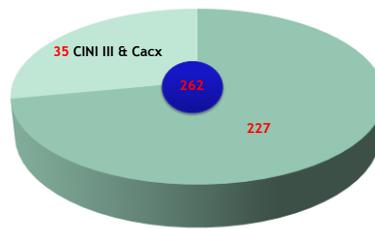
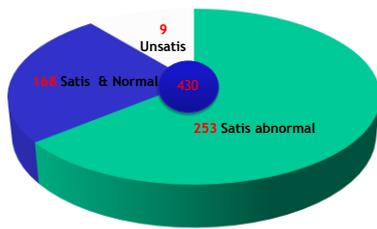
Year / Month	Total no. of screened cases via/vili	No. of Colposcopy done	Outcome									
			Satisfactory Normal	Satisfactory Abnormal	Unsatisfactory	Biopsy	Chronic cervicitis	CIN I	CIN II	CIN III	Cancer Cervix	Others
June 2013 to May 2014	778	778	460	317	1	318	220	8	5	0	15	70

430 via vili positive cases were subjected to colposcopy and if needed for biopsy and ECC.

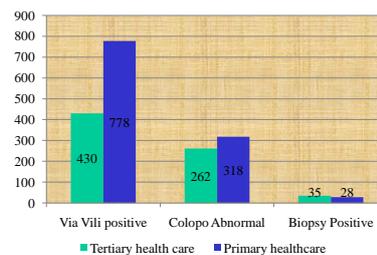
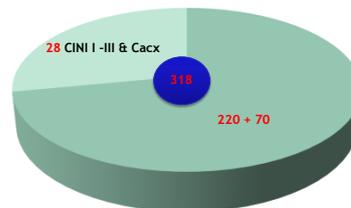
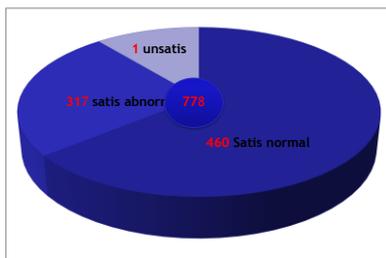
262 cases were colpo positive (60.9%) of which 35 cases were positive for CIN and cancer (13.4%).

Out of 778 referral positive cases, 318 cases (40.8%) were colposcopy positive of which 28 cases (8.8%) were positive for CIN and cancer.

**TERTIARY HOSPITAL**



**PRIMARY HEALTH CENTRES**



Centre	Via-vili Positive	Colpo Abnormal	Biopsy Positive
Tertiary	430	262 (60.9%)	35 (13.4%)
Primary	778	318 (40.8%)	28(8.8%)
		Z=6.802 P<0.001	Z=1.745 P>0.05

When compared between the two groups,confirmation of via-villi by colposcopy was statistically significant. But confirmation of colpopositive, by biopsy was not statistically significant

**IV. Discussion**

Confirmatory colpo abnormal cases of 60.9% among via-villi positive cases in the tertiary hospital was significantly greater than in referral cases (40.9% from primary health centres.)It shows that vili done in a tertiary hospital was stringent and effective than that of primary centres. Biopsy conformations (13.4% and 8.8%) were not statistically significant.

## **V. Conclusion**

Confirmatory colpoabnormal cases of 60.9% among via vili positive cases in the tertiary hospital was significantly higher than in referred cases (40.9%) from PHC.

Variable results in viavili may be due to

1. Observer training
2. Criteria for test positivity
3. Inter observer variation
4. Coexisting infections, inflammation, metaplasia.

Via-vili screening test may be improved in primary health centres still more to minimize the expenditure to govt. as well as to individuals.

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