

Detection of CA Cervix by Visual Inspection Using Acetic Acid Among Reproductive Age Women

Silpa P¹, J Jasmine², Jayestri Kurushev³, A Felicia Chitra⁴

How to cite this article:

Silpa P, J Jasmine, Jayestri Kurushev *et al.* Detection of CA Cervix by Visual Inspection Using Acetic Acid Among Reproductive Age Women. Community and Public Health Nursing. 2019;4(3):161-165.

Abstract

Background: Pelvic inflammatory disease, or PID, it is the infection of the organ of a women reproductive system, is the one of the most serious infections of women today. Mainly inflammation and infection of the upper genital tract, they include the uterus, fallopian tube, and cervix. PID can cause serious problem if it's not treated. **Methodology:** The quantitative Cross-sectional design was used to conduct this study. 100 reproductive age women were selected by using purposive sampling technique and who were attending the OG clinic at selected CHC, Puducherry. Out of 100, 63 reproductive age women had PID symptoms, and cervical screening done. Data collection was done by self structured questionnaire. It has two section. Section A comprises of: Socio demographic variables and Section B consist of: Self structured checklist to identify the symptoms of PID and prevalence of CA cervix by Acetic acid test among Reproductive age women. **Result:** The finding showed that 63 (63%) of Reproductive age women had symptoms of PID and 37 (37%) of Reproductive age women had normal characteristics of cervix. Application of Acetic acid in Cervix, findings showed that 63 (100%) of Reproductive age women had no Aceto white areas. **Conclusion:** Majority of the reproductive age women had symptoms of PID and not aware of pelvic inflammatory disease. If create awareness will prevent pelvic inflammatory disease and associated problems.

Keywords: CA cervix; Visual inspection using acetic acid; Reproductive age women.

Introduction

Women are the well-built pillars of today vibrant society. The United Nations and its specialized agencies that including WHO, UNICEF are all committed on the health of the women both general and the reproductive health of the women. The world bank is very much devoted

to this developmental issues. Non communicable disease such as cardiovascular disease including Hypertension, Diabetes mellitus, Cervical cancer (cervical cancer -ICD-10:C53) and breast cancer cause significant morbidity and mortality in the community. If the non communicable disease is not addressed by adopting the principle of "Prevention is better than cure", it would only result in the significant economic loss to the country.²

Pelvic inflammatory disease, or PID, it is the infection of the organ of a women reproductive system, is the one of the most serious infections of women today. Mainly inflammation and infection of the upper genital tract, they include the uterus, fallopian tube, and cervix.⁴ It's usually caused by a sexually transmitted infection (STI), like Chlamydia or gonorrhoea, and is treated with by antibiotics. Symptoms of PID early on pain in lower belly and pelvis, Heavy discharge is the symptoms from

Author's Affiliations: ¹M.Sc Nursing, Department of CHN, ²Professor, Department of MSN, ³Professor, Department of MHN, ⁴Principal Cum HOD, Department of MSN, Mother Theresa Post Graduate & Research Institute Of Health Sciences, Puducherry 605006, India.

Corresponding Author: J Jasmine, Professor, Department of MSN, Mother Theresa Post Graduate & Research Institute Of Health Sciences, Puducherry 605006, India.

E-mail: silpa.mohanan93@gmail.com

Received on 17.09.2019, **Accepted on** 23.10.2019



This work is licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0.

vagina with unpleasant smell or odour, bleeding between periods, pain during sex. PID can cause serious problem if it's not treated.^{1,3}

Basaloid squamous carcinoma (BSc) is a rare histopathological type of carcinoma of cervix. Most common variety of carcinoma cervix is the squamous cell carcinoma followed by the adenocarcinoma, while adenosquamous variety is less prevalent Adenoid basal carcinoma (ABC) is a variant of adenosquamous carcinoma.^{6,7} ABC stimulate the basal or basaloid cell carcinoma and of the skin on histopathologically as nests of basaloid cells extends from the surface epithelium to be the deep underlying tissues and cells at the periphery of tumor nests from a distinct parallel nuclear arrangement.^{9,10} The spread of squamous cell carcinoma occurs first by the direct extension to vaginal mucosa, the lower uterine segment, parametrium, pelvic wall, bladder and bowel. Distant metastasis occurs mainly through lymphatic spread, with same spread occurring through the circulatory system to liver, lungs and bones.^{11,12}

In most of the rural areas in India, PID is most common symptom with the women due to improper hygiene. The long standing cervical infections lead to persistent inflammation, and then further leads to cellular changes. These cellular changes are causing main risk for malignant transformation. So periodic cervical screening for the women is more important.^{5,13}

Objectives

- To assess the risk factors of Ca cervix among Reproductive age women.
- To determine the prevalence rate of Ca cervix by Visual inspection using Acetic acid among Reproductive age women.
- To associate the risk factors of Ca cervix with selected demographic variables.

Materials and Methods

Research methodology used in this study was quantitative research approach and which was found to be appropriate. Research design used for this study is cross-sectional design. This study was conducted in OG clinic in CHC, karikalampakkam, Puducherry. Prior to data collection formal permission and Ethical clearance was obtained from concerned authority. 100 reproductive age women were selected by using purposive sampling technique and who were attending the

OG clinic at selected CHC, Puducherry. Out of 100, 63 reproductive age women had PID symptoms, and cervical screening done. Inclusion criteria of sample were reproductive age women, who are willing to participate in the study, reproductive age women with PID symptoms. The tool description was divided into two sections. Section A: Consist of socio demographic variables profile include age, marital status, Religion, educational status occupational status, income, type of diet, type of family, mode of delivery, and use of contraception. Section B: consist of self structured checklist to identify the symptoms of PID.

Results

The finding showed that 63 (63%) of Reproductive age women had symptoms of PID and 37 (37%) of Reproductive age women had normal characteristics of cervix. Application of Acetic acid in Cervix, findings showed that 63 (100%) of Reproductive age women had no Aceto white areas, that none of the demographic variables had shown statistically significant association with PID among reproductive age women.

Table 1: Frequency and Percentage Distribution of Socio Demographic Data for Screened Women N = 100

Demographic Variables	No	%
<i>Age in years</i>		
1. 25-35 years	24	24
2. 36-40 years	27	27
3. 41-50 years	49	49
<i>Marital status</i>		
1. Married	87	87
2. Unmarried	13	13
3. Widow	0	0
4. Divorce	0	0
<i>Religion</i>		
1. Hindu	100	100
2. Muslim	0	0
3. Christian	0	0
4. Others	0	0
<i>Educational status</i>		
1. Primary	34	34
2. Secondary	54	54
3. Higher secondary	12	12
4. Degree	0	0
5. Illiterate	0	0
<i>Occupational status</i>		
1. Employed	52	52
2. Unemployed	48	48
3. Business	0	0

Cont.

Demographic Variables	No	%
4. Laborer	0	0
<i>Income</i>		
1. Rs. 3,000-4,999	98	98
2. Rs. 5,000-9,999	2	2
3. Rs. 10,000-14,999	0	0
4. Rs.15,000 and above	0	0
<i>Type of diet</i>		
1. Vegetarian	50	50
2. Non-vegetarian	0	0
3. Mixed	50	50
<i>Type of family</i>		
1. Nuclear	98	98
2. Joint	2	2
3. Extended	0	0
<i>Mode of delivery</i>		
1. Normal vaginal delivery	98	98
2. Cesaerean delivery	2	2
3. Instrumental delivery	0	0
<i>Use of contraception</i>		
1. Yes	0	0
2. No	100	100

The Table 1 shows that majority 49 (49%) were in the age group of 41-50 years, 87 (87%) were married, almost all 100 (100%) were Hindus, 54 (54%) were educated upto secondary level, 52 (52%) were employed, 98 (98%) had an income of Rs. 3,000-4,999, 50 (50%) were vegetarian and mixed type of diet respectively and 98 (98%) belonged to nuclear family 98 (98%) had normal vaginal delivery and almost all 100 (100%) had not used contraception.

Table 2: Frequency and Percentage Distribution of Risk Factors of CA Cervix Among Reproductive Age Women N=100

Visual Inspection of Cervix	No.	%
<i>Colour</i>		
1. Pink	99	99
2. Redness or congestion	1	1
3. Pallor	0	0
<i>Secretion</i>		
1. Clear mucoid secretion	74	74
2. Abnormal discharge	26	26
<i>Odour</i>		
1. Odourless	74	74
2. Foul smelling discharge	26	26
<i>Surface</i>		
1. Smooth	100	100
2. Irregular	0	0
<i>Epithelium</i>		
1. Atrophic epithelium	0	0
2. Hypertrophy of cervix epithelium	0	0
3. Keratinized cervix epithelium	0	0
4. Normal cervix epithelium	100	100

Presence of	No	%
1. Erosions	0	0
2. Groin infection	44	44
3. Polyps	0	0
4. Nabothian follicles	0	0
5. Prolapse uterus	1	1
6. Normal	55	55

The Table 2 shows that risk factors of CA cervix, It shows That, that 99 (99%) had pink colour and only one (1%) had redness or congestion. Regarding secretion, 74 (74%) had clear mucoid secretion and 26 (26%) had abnormal discharge. Considering the odour, 74 (74%) were odourless and 26 (26%) had foul smelling discharge. With regard to epithelium, almost all 100 (100%) had normal cervix epithelium. The analysis revealed that 55 (55%) were normal, 44 (44%) had presence of groin infection and only one (1%) had prolapsed uterus.

Table 3: Frequency and Percentage Distribution of Reproductive Age Women with PID Symptoms N = 100

PID	No.	%
Present	63	63%
Absent	37	37%

The Table 3 shows that majority of Reproductive age women had 63 (63%) symptoms of PID and 37 (37%) were normal among reproductive age women.

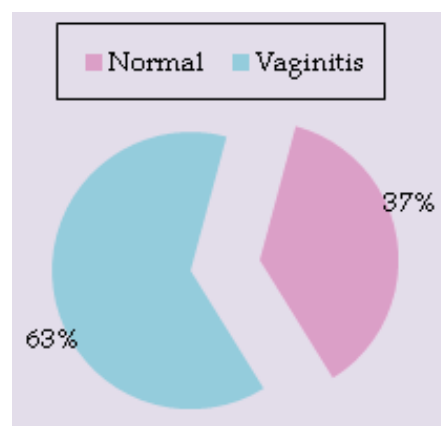


Fig. 1: Frequency and Percentage Distribution of Reproductive Age Women with PID Symptoms

The Figure 1 shows that majority of Reproductive age women had 63 (63%) symptoms of PID and 37 (37%) were normal among reproductive age women.

Table 4: Frequency and Percentage Distribution of Ca Cervix by Visual Inspection using Acetic Acid Among Reproductive Age Women
N = 63

Application of 5% Acetic acid in cervix	No	%
1. Positive	0	0
2. Negative	63	100%

The Table 4 shows that application of Acetic acid in Cervix, findings showed that 63 (100%) of Reproductive age women had no Aceto white areas.

The above observations revealed that none of the reproductive age women had cancerous lesions and majority of them have symptoms of PID.

Discussion

A study was conducted to detect Ca cervix by Visual inspection using Acetic acid among reproductive age women in selected CHC at Puducherry with the objectives of, to assess the risk factors of Ca cervix among Reproductive age women, to determine the prevalence rate of Ca cervix by Visual inspection using Acetic acid among Reproductive age women, to associate the risk factors of ca cervix with selected demographic variables.

The study finding shows that majority 49 (49%) were in the age group of 41–50 years, 87 (87%) were married, almost all 100 (100%) were Hindus, 54 (54%) were educated upto secondary level, 52 (52%) were employed, 98 (98%) had an income of Rs. 3,000–4,999, 50 (50%) were vegetarian and mixed type of diet respectively and 98 (98%) belonged to nuclear family 98 (98%) had normal vaginal delivery and almost all 100 (100%) had not used contraception.

The first objective of the study, to assess the risk factor's of Ca cervix among Reproductive age women. It shows that the risk factors of PID, that 99 (99%) had pink colour and only one (1%) had redness or congestion. Regarding secretion, 74 (74%) had clear mucoid secretion and 26 (26%) had abnormal discharge. Considering the odour, 74 (74%) were odourless and 26 (26%) had foul smelling discharge. With regard to epithelium, almost all 100 (100%) had normal cervix epithelium. The analysis revealed that 55 (55%) were normal, 44 (44%) had presence of groin infection and only one (1%) had prolapsed uterus.

The supported previous study is Tahamina Khanum (2018) conducted study cross-sectional study on "Per vaginal findings among the women with pelvic inflammatory Disease at a Tertiary

care Hospital in Dhaka city, used 50 sample, result showed that, 20% patients had 1st degree perineal tear, 6% had utero-vaginal prolapsed and 24% had foul smelling vaginal discharge.¹⁵

The second objective of the study, to determine the prevalence rate of Ca cervix by Visual inspection using Acetic acid among Reproductive age women. It shows that application of cervix with acetic acid shows that almost all 63 (100%) had no aceto white areas, The above observations revealed that none of the reproductive age women had cancerous lesions.

The supported previous study is Haripriya Vedantham (2010) conducted study on "Determinants of VIA (Visual inspection of the cervix after Acetic acid Application) positivity in cervical cancer screening of women in a Peri-Urban Area in Andra Pradesh", India, used 19 sample, result showed that 5 were positive by VIA. In multivariate analysis, VIA positivity (12.74%) was associated with older age, positive pap smear. Cervical inflammation of unknown causes was present in 21.62% of women.⁸

Conclusion

The majority of the women were not aware of pelvic inflammatory disease and related consequences, and the role of the community health nurse interacting with the family of women to create the awareness of pelvic inflammatory disease and precancerous/cancer lesions of the cervix is crucial as it is necessary to implement primary and secondary preventive measures. this study has given some ideas that certain factors such as knowledge, education and practices among the women has a great influence on the health practices of the women. Personal hygiene, menstrual hygiene and sexual health play a vital role in the occurrence of precancerous lesions of the cervix.

Recommendation

1. Awareness programme can be conducted in primary health centers regarding precancerous lesions and the screening methods.
2. A study can be conducted to assess the stress level among women who are undergoing VIA, VILI. Followed VIAM.
3. The same study can be conducted on a large sample.
4. Mass health education programme to be given among the women who are vulnerable to precancerous lesions.

5. A comparative study should be conducted with rural and urban population.
6. A study to assess the attitude of the women towards the cervical cancer screening programme.
7. A study to assess health seeking behavior on PID among reproductive age women.
7. Fraser DM and Cooper MA. Myles Text book of Midwives. 14th ed. London: Churchill livingstone. 2005.p.572.
8. Haripriya Vedantham, Determinants of VIA positivity in cervical cancer screening of women in a eri-urban Area in Andra Pradesh, India.NIH public Access. 2010;19(5):1373–80.
9. Jones L. *et al.*, Fundamentals of Obstetrics and Gynaecology. 8th ed. USA: Elsevier Publication. 2010.p.264.

References

1. AV Raman. Reeder, Martin, Koniak–Griffin’s Text book of Maternity Nursing Family, New born and Women’s health. 19th ed. New Delhi: Wolters Kluwer Health 2014.p.556.
2. Jemal A, Bray F, Center MM. Global cancer statistics. CA Cancer J Clin. 2011 Mar-Apr;61(2):69-90.
3. Chris Henderson, Sue Macdonald. Mayes’ Midwifery A Text Book For Midwives. 13th ed. Baillieore Tindall Publication. 2010.p.768.
4. Cunningham FG, Leveno KJ, Bloom SL, *et al.* Williams Obstetrics. 22nd ed. USA: McGraw Hill, New York. 2005.p.709.
5. Dutta DC. Text book of Obstetrics. 6th ed. Calcutta: New central book agency. 2004.p.484.
6. Davidson M, London M and Ladewig P. Old’s Maternity–Newborn Nursing and Women’s Health. 9th ed. USA: Pearson Education. 2012.pp.99–102.
10. Katharyan Amay. Comprehensive Maternity Nursing. 2nd edition. Newyork: Lippincott companies. 1990.p.84.
11. Klossner NJ and Hatfield NT. Introductory Maternity and Paediatric Nursing. 2nd ed. Philadelphia: Lippincott Williams and Wilkins. 2010;970:71.
12. Lowdermilk DL, Perry SE, Cashion K and Alden KR. Maternity and Women’s Health Care. 10th ed. USA: Elsevier. 2012;69,43,75–76.
13. Nicki R. Colledge. Davidsons principle and practice of Medicine. 1st edition. USA: Churchill Living Stone Elsevier. 2012.p.276.
14. Polit. Beck. Nursing Research. 10th ed. Philadelphia: Lippincott Williams and Wilkins. 2008.
15. Khanum T. Per vaginal findings among the women with pelvic inflammatory Disease: Tertiary care Hospital in Dhaka city. 2018.

