

Camp Screening of Symptomatic Tribal Females for Cervical Cancer in Rural Area of Rajasthan

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Abstract

Background: Cervical cancer is one of the most common cancers of Indian females. Tribal Rajasthan differs a lot from rest of India in respect of geographical conditions, environment, culture, population density etc. and it also has relatively lower literacy rate which is one of the risk factor for many diseases

The objective of this study was to estimate the prevalence of cervical cytological pattern in females of tribal part of Rajasthan by using conventional Papanicolaou (Pap) smears and make them aware through camp for the screening of inflammatory, premalignant and malignant lesions of the cervix. And protect them from unnecessary hysterectomies of young tribal population and to stop this malpractice.

Methods: This study was conducted at ZEEL MULTISPECIALTY HOSPITAL SAGWARARAJASTHAN, in symptomatic patient camp, in which 100 females who was symptomatic, Pap smear examination done. After staining with conventional Papanicolaou technique, all smears were classified as per Bethesda nomenclature.

Results: Out of 100 smears 96% were abnormal Pap smears, 4 % were normal Pap smears. Out of 96 abnormal smears, 70% smears reported to have inflammatory/ changes whereas, ASCUS in 5% ,LSIL changes 2%, HSIL in 1% Pap smear, TRICHOMONAL in 12% and Squamous cell carcinoma was reported in 6% smears.

Conclusions: Pap smear examination is an effective screening procedure to detect cervical cytological abnormalities. It is recommended to improve the awareness about the disease amongst females and skills of health care personal about proper preparation of Pap smear. Mean age of squamous cell carcinoma of cervix is the 59.5 year.

Keywords: Cervical pattern, Bethesda system, Pap smear

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I. Introduction

Reproductive Tract Infections are diseases which are internally placed and nobody from outside can see them. The most important aspect here is majority of these are symptom free or with minor symptoms only. Many times the symptoms like itching, dyspareunia, white discharge etc are ignored as to normal situations by many women. The situation of tribal women in sagwara is very pathetic. They are totally unaware of their own health problems and least bothered about Reproductive Tract infections. The prevalence of RTIs are very high among these population. The role of menstrual hygiene is very important in development of RTIs. The sexual hygiene like washing after intercourse etc is also very important factor. No study has been done in these perspectives among any population and especially among the tribal population.

The pre cancerous changes of cancer of uterine cervix if diagnosed ten or fifteen years prior to the development of cancer, can be arrested at that stage.¹

Cervical cancer is the fourth most frequent cancer in women with an estimated 570,000 new cases in 2018 representing 6.6% of all female cancers.²

However, there is a marked difference in the distribution of cancer sites across different regions of the world. In contrast to developed countries, cervical cancer is a public health problem in developing countries like India, so much so that India alone accounts for one-quarter of the worldwide burden of cervical cancers.³⁻⁴

According to National Cancer Registry Program of India, cancers of uterine cervix and breast are leading malignancies seen in Indian women.⁵

Papanicolaou (PAP) smear as the key screening procedure for cervical carcinoma, detects 70% – 80% cases of abnormal cells in different stages of development of the disease. It is the simplest, inexpensive, reliable

and most acceptable procedure for mass screening. In developed countries screening by PAP smear has shown to have reduced rate as well as morbidity and mortality due to carcinoma cervix.⁶

The Papanicolaou test also known as Pap test, Pap smear, cervical smear or smear test is a screening method used to detect potentially precancerous and cancerous processes in the cervix. Greek doctor Georgios Papanikolaou invented this test and it was named after him.⁷

In general, in countries where Pap smear screening is routine, it is recommended that females who have had sex should seek regular Pap smear testing. Guidelines on frequency vary from every three to five years. If results are abnormal, and depending on the nature of the abnormality, the test may need to be repeated in six to twelve months.⁸

In 1988, the Bethesda system of terminology has been introduced to sub-classify the lesions into grades: high grade and low grade Squamous Intraepithelial Lesions (SIL) for Pap smear reporting and some studies reported comparison of various terminologies.⁹⁻¹⁰

The Bethesda System (TBS) for reporting the results of cervical cytology was developed as a uniform system of terminology that could provide clear guidance for clinical management.¹¹

Therefore, this study was carried out to understand and present burden of cervical cancer in India, as well as to appraise the various cervical cancer screening methods and studies conducted for evaluating screening test for the detection of cervical carcinoma. However, since India is culturally, economically, and sociodemographically dissimilar from other Western countries, we limited the scope of our study to screening trials conducted in Indian rural tribal population, so as to provide locally relevant evidence-based recommendations for cervical cancer screening in Indian population. Sagwara is a mixed economical zone with poor tribal population and Kuwait and Mumbai migrating people of good socio-economical status.

II. Materials And Methods

This study was carried out in Gynecology camp at the Zeel Multi-Speciality Hospital Sagwaradungarpur from the 1 January 2019 to 5 January 2019 India. Around 100 Pap smears were taken from women between ages of 21 to 65 years presenting with different Gynecological complaints by using Ayres Spatula. Smears were reported as per the Bethesda system. Only symptomatic women were selected for the Pap smear.

Inclusion criteria

- Women between 21 to 65 years of age with sexual history.

Exclusion criteria

- Women below 21 years.
- Women without sexual exposure.
- Women above 65 years.

PROCEDURE

Written informed consent was obtained from all women. Patients were placed in the lithotomy position, and a sterile bivalve speculum was inserted into the vagina. The posterior vaginal wall was retracted posteriorly and the anterior vaginal wall anteriorly to allow proper visualization of the cervix and vaginal wall.

Pap smears are taken by using Ayres Spatula.

- The broad end of spatula was placed on the Cervix and rotated through 360° and the collected material was spread over a glass slide.
- The oblong re-labeled narrow end of spatula was used to take smear from posterior vaginal fornix and spread over a second glass slide.
- The Endo-cervical sample was collected using a Cyto brush and was spread over labeled third glass slide.

All the slides were labelled and immediately transferred to 95% Ethyl alcohol (Transport Medium) and sent to Pathology Department for Cytological study.

Evaluation was done by Cytology using Bethesda Classification.

- Within normal limits

Reactive/ reparative changes

- Atypical squamous cells of undetermined significance (ASCUS)
- Atypical glandular cells of undetermined significance (AGUS)
- Low Grade Squamous intraepithelial invasion (LSIL)
- High Grade Squamous intraepithelial invasion (HSIL)
- Invasive carcinoma

TABLE NO. 1
married life No.of patient

1-9	23
10-20	28
21-30	36
31-40	13

TABLE NO .2
AGE. No. of patient

21-30	23
31-40	29
41-50	32
51-65	16

TABLE NO. 3MARRIAGE
AGE – No. of patient

<20	65
>20	35

TABLE NO. 4 SYMPTOMSNO OF PATIENT

White discharge	76
burning micturition	43
Itching at the genital organ	38
Menstrual irregularity	37
Pain abdomen	26
post coital bleeding	3
Backache	9
pain during the sex	7

(Morethan one symptom may be present in one patient.)

TABLE NO.5 AGE GROUP
AGE PERCENTAGE

21-30	23%
31-40	29%
41-50	32%
51-65	16%

TABLE NO.6
CLINICAL FINDING No of patient

CERVICAL HYPERTROPHID	66
LEUCOPALKIA	9
EROSIN CERVIX	32
PROMINENT VESSELS	20
VAGINITIS	74
BLEEDING THOUGH CERVICAL OS	14
IRREGULAR GROWTH	6
NABOTHIAN FOLLICLE	1
POLYP	2

(MORE THAN ONE FINDING MAY BE PRESENT IN ONE PATIENT.)

TABLE NO.7
RESULT OF PAP SEMAR No. of patient %

NORMAL	4%
INFLAMMATION	70%
ASCUS	5%
HISIL	1%
LSIL	2%
TRICHOMONAL	12%
SCC	6%

Reactive/repairative changes

- Atypical squamous cells of undetermined significance (ASCUS)
- Atypical glandular cells of undetermined significance (AGUS)
- Low Grade Squamous intraepithelial invasion (LSIL)
- High Grade Squamous intraepithelial invasion (HSIL)

• Invasive carcinoma

TABLE NO.8

Finding	mean age
ASCUS	38.6
SCC	59.5
LSIL	39.5
HSIL	32.9
TRICHOMONAL INFECTION	32.4
INFLAMMATION	30

TABLE NO. 9

Women using during period	PERCENTAGE
Cloth	65%
PAD	35%

TABLE NO.10

HOURS OF USING CLOTH/PAD	PERCENTAGE
>12 hr	59%
<12 hr	41%

TABLE NO.11

OUTSIDE JOB	PERCENTAGE
DOING OUTSIDE JOB	78%
LOCAL JOB	22%

III. Results

In our study we analysed 100 Pap smears taken from women presenting to Gynecology OPD CAMP at ZEEL MULTISPECIALITY HOSPITAL ,SAGWARA ,age between 21 to 65 years, presenting with different Gynaecological complaints .

. In our study we have taken 100women, in them 32were between 41 to 50 years, 29 women were between 31 to 40 years, 23 women were between 21 to 30 years, women between 51 to 65 were 16.(table-5)

.Among the 100 women undergoing Pap smear tests, 76 women presented with chronic white discharge, burning micturition was present in 43 women .one woman was presenting more than one complaint. Genitalia itching showed in 38 women, menstrual irregularity in 37 women ,pain abdomen in 26 women ,3 women present with post coital bleeding ,9 have backache and 7women presented with pain during sex (table-4).

Among the 100 Pap smear reports analyzed 70%reports showed inflammatory smears. TRICHOMONAL infection was seen in 12% smear. 2% smears were given as Low grade squamous intraepithelial lesion (LSIL). ASCUS was seen in 5% smears. High grade squamous intraepithelial lesion (HSIL) was seen in 1% smears. Squamous cell carcinoma was seen in 6 cases. (Table-7)

It was seen that, if one of the partner was doing job outside, then prevalent of abnormal smear was 78% Because it is tribal area so it is tradition to use the clothes .so it found that women using the clothes more then 12 hour ,have more chances of abnormal smear

OBJECTIVE:

- To study the pattern of menstrual and sexual hygiene among the tribal population of SAGWARA
- To estimate the prevalence of reproductive infections among the tribal women
- The prevalence of Pre-cancer and Cancer of Uterine Cervix among this population
- To study the social and behavioural factors which contribute to the development of RTI
- To create awareness among this population for the control and prevention of RTIs
- To stop the unnecessary hysterectomies of young tribal ladies (average age 20 to 25 years), which is prevalent in this area.

GOALS:

- To provide assistance in the fields which are lacking in providing the tribal women better lifestyle.
- To empower the tribal women to protect them from developing RTIs.
- To provide them steady and sustainable development

IV. Discussion

It is accepted worldwide that early detection of precancerous lesions of cervix can be done by cytological examination of cervix by Pap smears. If not diagnosed and treated early, these precancerous lesions are likely to progress to invasive Cancers. It is proven that the cytological screening programs conducted in advanced countries played a major role in reducing mortality and morbidity due to Cancer Cervix.

In our study we have taken 100 Pap smears taken from women presenting to Gynecology camp of ZEEL MULTISPECIALITY HOSPITAL SAGWARA between 21 to 65 years presenting with different Gynecological complaints .

In study conducted by Sunita ET al¹² 560 Pap smear reports were analysed. In P.vijaya¹³ 200 pap smear were analyzed .In our study 100 pap smear were collected in camp .

In study conducted by P.VIJAYA et al maximum number of women were between 45 to 55 years age group (34%). In study conducted by Sunita et al maximum number of women were between 31 to 40 years age group (32.68%). In study conducted us between 41 to 50 years maximum number of women were examined.

.In P.vijaya study abnormal Pap smear reports were 187(93.5%), whereas in study conducted by Sunita et Al 433(77.32%) reports were abnormal. In study conducted by us abnormal Pap smear reports were 96%

Inflammatory smear reports were 134(67%) in P VIJAYA study, whereas in study conducted by Sunita et al 403(71.96%) reports were inflammatory and in study conducted by US inflammatory Pap smear reports were 70(70%).

Smear showing ASCUS was 5 (2.5%).in P. VIJAYA study. In study conducted by Sunita et al 13(2.3%) reports showed ASCUS and in study conducted by US reports showing ASCUS were 5(5%)

.Smears showing LSIL (Low grade squamous intraepithelial lesion) were 15(7.5%) in P VIJAYA study. In study conducted by Sunita et al 11(1.9%) reports gave LSIL and in study conducted by us reports showing LSIL were 2(2%)

In P.vijaya study HSIL (High grade squamous intraepithelial lesion) reports were 12(6%), whereas in study conducted by Sunita et al 2(0.3%) reports gave HSIL. In study conducted by us HSIL reports were 1(1%).

Smears showing squamous cell carcinoma were 2(1%) in P.vijaya study. In study conducted by Sunita et al 3(0.5%) reports gave squamous cell carcinoma and in study conducted by us reports showing squamous cell carcinoma were 6(6%).

Though having few limitations in performing rural areas reports in our study like many other studies has shown the importance of Pap smear test in screening cervical cancer. By conducting health camps, increasing health awareness and performing Pap smear screening programmes the incidence of cervical carcinoma can be decreased

V. Conclusion

In an area like western Rajasthan where female health is still a neglected aspect, such simple technique is a boon to screen the fatal disease at an early stage and improve the prognosis of the disease. It has been concluded that there is need of training of healthcare personal about proper sampling and preparation of Pap smear in this part of the country. Poor hygiene, lack of knowledge and awareness, are also responsible factors for the abnormal Pap smears which need special attention after early detection in prevention of cancer activity

The tribal and even the educated people who migrant to Kuwait were totally unaware of the pap smear importance. even they not show interest to collect the abnormal pap smear report .This is also shown that many camps are conducted by government but results are not distributed to concerned persons properly.

One is very disappointing thing was found that unnecessary hysterectomy are doing of young ladies even of the age of 20 to 25 years without doing proper screening and medical persons were playing with their life. It is necessary for administration to take strict action to stop this malpractice and to give healthy life to innocent tribals .

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