Cervical Cancer Screening in Post-Conflict Underdeveloped Areas

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ABSTRACT

Cervical cancer is a huge health concern. It is the second most common female tumor worldwide. It is consider a professional challenge for gynecologist. 90% of newly diagnosed cases are in the countries with a low socio-economic growth. Lack of health care infrastructure, accessibility, low level of education, lack of hygienic habits are all the factors contributing to this figure. Cervical cancer occurs mainly in low-resource, underserved regions as part of a complex of diseases linked to poverty, race/ethnicity, and/or other health disparities.

It has been shown that only 5% of women living in under developed countries, are having regular yearly screening. Under given circumstances regular cervical cancer screening using cervical cytology (Papanicolaou [Pap] smears) is the best cost-effective option gynecologist have. The goal of this scientific paper is to present the results of screening test done in Clinical Center Pristina Gračanica Kosovo, Serbia. Screening was done retrospectively in the period of 2011-2015. The total number of screened women was 2871. Pap smear test and colposcopy were performed. In 6.3% of the cases Pap test was positive, including 96% Papa III, and 12 cases of cervical cancer were diagnosed.

Keywords: cervical cancer, screening, Pap smear, colposcopy

1. INTRODUCTION

Every year 500,000 new cases with the cervical cancer are diagnosed globally. Statistics in Europe shows that out of 60,000 diagnosed cases 30,000 die. Around 90% of newly diagnosed cases are coming from under developed countries in the World. This leads to conclusion that there is a direct correlation between incidence of cervical cancer and low health care resource setting. [1,2,5,11,13,17]

Especially vulnerable are women living in conflicts or in post-conflict regions. In addition, lack of health care infrastructure, accessibility, low level of education, lack of hygienic habits, low level of health culture, low socio-economic status are all the factors contributing to this figures. According to official data, in Serbia the incidence of cervical cancer is 13-20 per 100,000 women and mortality rate is 6 per 100,000. [3,4,5,7,14,17]

It should be also taken into account that a large number of women insufficiently or not use at all the services of a gynecologists. Therefore it is a reasonable to suspect that incidence and mortality rate are higher than suggested. The
most vulnerable category of women are those of minority communities in Kosovo, for all the above mentioned reasons and additionally due to the lack of insecurity caused by limited human rights. [1,7,16,17] Under given circumstances, when there are inadequate resources for the provision of a basic health care services, for the gynecologists working under these condition is a great challenge to simultaneously provide the services, and work on health promotion and education of the population. [5, 8, 9,10,11,12] Screening is based on a combination of cytology (Pap test) and colposcopy and has multiple benefits, such as cost-benefit, the fact that the most gynecologists have been trained to perform screening and the proven fact that combination of cytology and colposcopy increases the accuracy in the diagnosis of premalignant and malignant form of the cervix up to 98%. [2, 12, 13, 14] Data obtained by screening, provide the better understanding of this malignancy .Our goal is to get closer to the statistics numbers in developed countries, diagnose the disease at an early stage and reduce mortality significantly. [1, 6, 17]

Objective
To present the results of cervical cancer data screening in Pristina GAK - Gračanica for a five-year period.

2. METHODS
The study was conducted retrospectively in the period of 2011-2015 in Gynecology and Obstetrics Clinic, Clinical Center Prishtina Gračanica. The total number of screened patient was 2871 .All the patient's gave anamnesis, Pap smear test and colposcopy were done accordingly. Institute of Pathology, Faculty of Medicine in Kosovska Mitrovica did cytological analysis of collected preparations. According to the protocol patients identified with the positive Papa test (Papa III, IV, V), had cervical biopsies or fractionated explorative curettage done afterwards .All received data were analyzed by descriptive statistics.

3. RESULTS
The study included 2871 patients, all had colposcopy done. During the study period a total of number 2871 patients was examined, colposcopy and Pap smear were done respectfully (figure 1).

Out of 2871 examined patients, 178 patients (6,2 %) were diagnosed with a positive Pap smear test (figure 2). The most frequent clinical finding was punctatio. Also, it was leucoplacio (figure 3).
Statistically greater number of abnormal colposcopy was found is in patients over 35 years (figure 4).
No statistically significant difference between women who gave birth and women who have not given birth (figure 5).
Abnormal colposcopy findings in smokers study population was 20% whereas 5% in non-smokers representing a statistically significant difference (x = 82.61, P <0.01) (figure 6)
Figure 6: Correlation between colposcopy findings and cigarette smoking.

4. DISCUSSION

Screening results for Gynaecology and obstetrics clinic Gračanica, clearly indicate an increase interested in screening process as the total number of women examined in comparison with previous years was higher. This also indicates increased engagement of gynecologists in diagnostics, health education and health promotion. Along with the screening process lectures in the community as well as health education sessions were held among female population. [1, 7, 16, 17]

The whole study was implemented in the post-conflict environment, with a very limited resources in a poor socio-economic situation. Percentage of Pap positive test was 178, or 6.2%, and ranged within the limits given in other literature. [4,5,6,9,10]

The most frequently diagnosed was Pap III. Colposcopy findings in patients with a positive Pap were Punctatio and mosaic. This data are within the limits with the world literature due to the fact that was a group of patients with a positive Pap test. Age related positive Pap patients, were usually diagnosed in the age group of 35-45.12 patients were diagnosed with cancer, 6 patients were diagnosed with cervical cancer and 6 with endometrial carcinoma. This results indicates a lack of health care culture and inaccessibility to it among targeted population. This age group in developed areas regularly visits gynecologists therefore diagnose can be done in a timely manner, in the early stage of disease. [7, 11, 14, 15]

There is a correlation between colposcopy and cytological findings corresponding to over 90%, indicating that the testing has been done correctly and that colposcopy was done professionally. Results are consistent with data available throughout the literature. [8, 11, 16, 17]

5. CONCLUSION

Screening data obtained from 2,871 patients with a low socio-economic status, suggested the following:

- The number of patients with a positive Pap is 178 or 6.2%. [1,4,5,8, 1]
- Patients with 95% positive Pap had Pap III ASCUS [4, 11, 13, 16, 18]
- The most common colposcopy findings are punctatio and mosaic [1, 7, 13, 14,16]
- Positive Pap test is the most common in the age group of 35-45 years old [7, 12, 16, 17]
- 12 patients were diagnosed with cancer including 6 cervix cancer and 6 endometrial carcinoma [7, 16, 17]
- Abnormal colposcopy findings were statistically more frequent in women with a lower educational level [7, 11, 16, 17]
- Statistically significant difference of abnormal colposcopy findings was found in smokers’ population compared to non-smokers’ population. [13, 14, 15, 16]
- Cervix screening of premalignant and malignant changes is the most efficacious tool to reduce morbidity and mortality rates. Beside an adequate gynecologists training it is also necessary to improve socio-economic status of the population and work permanently on the education and health promotion among female population. [7, 8, 9, 16, 17]
REFERENCES