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# FREQUENCY OF RISK FACTORS FOR CERVICAL CANCER AMONG WOMEN IN FERTILE AGE

Amela D`ubur<sup>1</sup>, Ajnija Omani<sup>1</sup>, Alen D`ubur<sup>2</sup>, Sanja Alispahi<sup>3</sup>

1. Institute of Social Medicine, Faculty of Medicine, Sarajevo,

2. d.o.o Bosnalijek,

3. Faculty of Philosophy, Sarajevo

## ABSTRACT

Cervical and breast cancer are usually type of tumor that are found among women in fertile age in Bosnia and Herzegovina. Final goal was to establish frequency of risk factors that are responsible for development of those types of cancer as well as establish possibility of prevention, according to the existence of each risk factor. Research was conducted through out surveys among women which were selected by accident. The amount of questioned women is 200, and out of that number 70 (35%) were out of rural environment, 130 (65%) were from urban environment which led to statistic- processed information. Variables that were defining our interviews were: age, marital status, education level, stay during the war in B&H, number of given birth, consistency of gynecological examinations, changes that were found during the medical (gynecological) examination, number of sexual partners, usage of contraception, existence of sexual infections, usage of tobacco, existence of genetic factor.

The most important fact is that over 50% of interviewees do not visit gynecologist, and that the gynecological infections are frequent. Usage of tobacco is in high percent founded among interviewees from urban environment (85%).

**Keywords:** risk factors, cervical cancer, fertile age.

## INTRODUCTION

With the references to the Institute for the Public health (HNK) in the county of Stolac in the year of 2002 was populated by 9861 resident. Women were presenting 48.7% of population (women in fertile age (15-49) is 33.4% -3300 women.). Cervical and breast cancer are usually type of tumor that are found among women in fertile age in Bosnia and Herzegovina. For development of cervical cancer was discovered numerous of factors the can lead us to its founding, and the most important is neglect which is shown through out bad hygiene (1,2). Early age for the first intercourse, numerous of sexual partners, high risk of male partners (4,5) (those that are exposed to promiscuity), bad social and economical status, usage of tobacco, overconsumation of coffee, usage of contraception (6) . All of these are considered factors that can lead to development of cervical cancer. Considering all of the above, we tried to conduct a

research that will circulate through the risk factors in the area that is specific in B&H reality; in social, political as well as in economical sector.

## Aim

To determine frequency of tumor existence among women in fertile age in County of Stolac.

To ascertained differences in development of factors in rural and urban area.

To define possibility of preventing arrangement in relation to the consistency of appearance each risk factor.

## MATERIAL AND METHODS

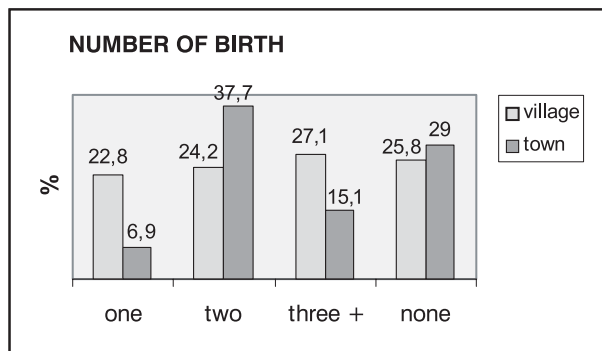
The research was professed through out poll among women in fertile age by method of accident model. The amount of questioned women is 200, and out of that number 70 (35%) were out of rural environment, 130 (65%) were from urban environment, which led to statistic processed information. Variables that were defining our interviewees were: age, marital status, education level, stay during the war in B&H, number of given birth, consistency of gynecological examinations, changes that were found during the medical (gynecological) examination, number of sexual partners, usage of contraception, existence of sexual infections, usage of tobacco, existence of genetic factor. The inquisition was implement during 01.11.-01.12.2002 in community, County of Stolac.

## RESULTS

Study overhaul of consistency risk factors for development tumor was operated in county of Stolac, and included 200 women in fertile age, out of those 130 (65%) from urban area, and the rest of the from rural area in the county. The research was professed through out poll among women in fertile age by method of accident model, considering non-equal (caused out many reasons) distribution of female population in this county. The result shows that the most of women from rural environment is the age of group (35-44 years, 0%), and in urban environment the age group (45-49 years, 35.5%). In rural region there was 80.5% married, and in urban region was 83.9% married interviewees. Construing level of education, interviewees we pillar that major half of them from rural area has lower education, and that half of interviews from urban area has at least high school diploma.

Out of all interviewed women in rural area, 90% spent wartime as a refugee, mostly (76%) in B&H. Very similar situation is considering interviewees from urban area, because 83.8% were banished from county of Stolac. Predisposing factors we must overlook through whole spectarof possibilities physiological and potential pathological impressions and those characteristics are recorded in answers of interviewees.

Graph 1.



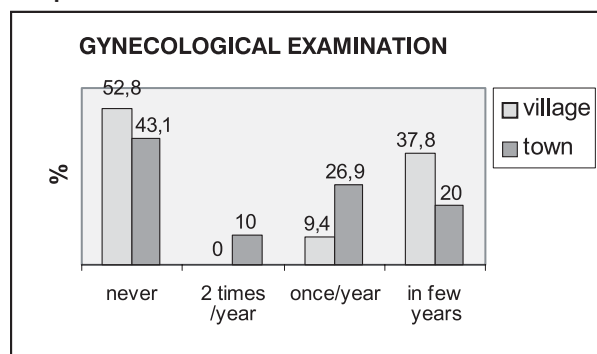
The biggest percentage of the inquiries from urban area (37%) has two given birth, but the most of the percentage of the inquiries from rural area (27.1%) has three and more given births. The small percentage of interviewees from rural area has one birth; while other inquires from urban area was three given births. It is a surprising fact that occurrence of giving birth between village and town. On the other hand, the rate of non-birth is very high, especially in urban area (29.3%, graph # 1).

If we observe gynecological examination, it is shown clearly that 52.8% of the interviewees from rural area don't ever visit such kind of examination, but 37.8 % did that only once in many years. In urban area situation is somewhat fortunate, even though 43.1% of the inquires never attends gynecological examinations, and 26.9% does that once a year. ( graph # 2)

Table 1.

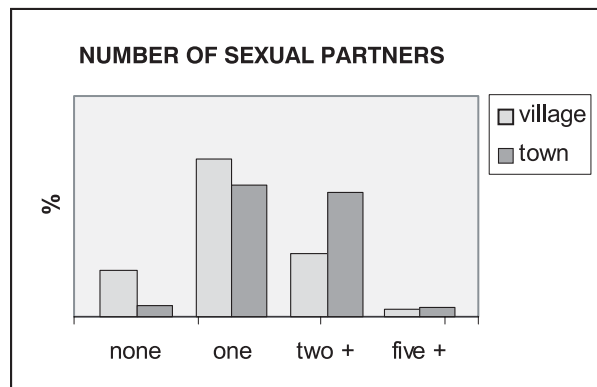
Usage of contraceptive methods	Rural Area		Urban Area	
	Number:	Percentage:	Number:	Percentage:
CONDOM	1	1,4	9	7,0
FOAM/JELLY	1	1,4	6	4,6
DIAPHRAGM	3	4,2	15	11,5
IUD	2	2,8	18	13,8
PILL	6	8,4	24	18,5
PERIODIC ABSTINECE	5	7,6	6	4,6
COITUS INTERRUPTUS	11	15,7	15	12,5
NOTHING	41	58,5	37	28,5
<b>SUM:</b>	<b>70</b>	<b>100</b>	<b>130</b>	<b>100</b>

Graph 2.



57.3% interviewees from rural area and 48.7% from urban area claim that that had one sexual partner, but the percent of those that confirmed more than five partners is very low (2.8% in rural area, and 3.6% in urban area). (Graph #3.)

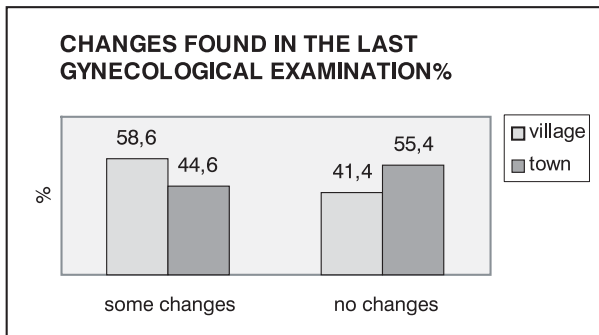
Graph 3.



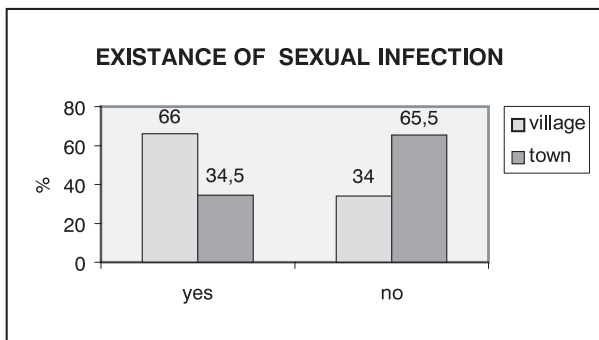
Usage of the contraceptive methods isn't scientifically spread among interviewees in urban and rural area. 58.5 % of surveyed women in rural area and 28.5% in urban area state that during the intercourse don't use any kind of protection. (table #1).

Among the interviewees that are using certain kind of protection, supply contraceptive pills (8.4 % in village, 18.5% in town)

Graph 4.

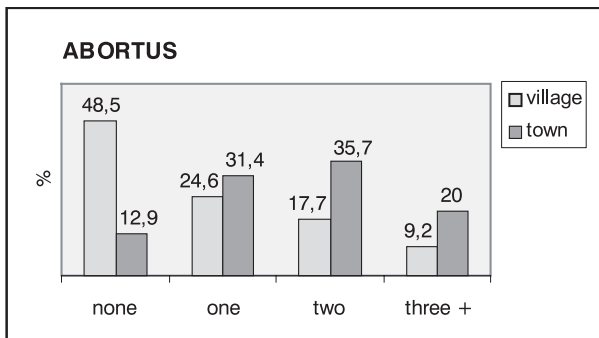


Graph 5.



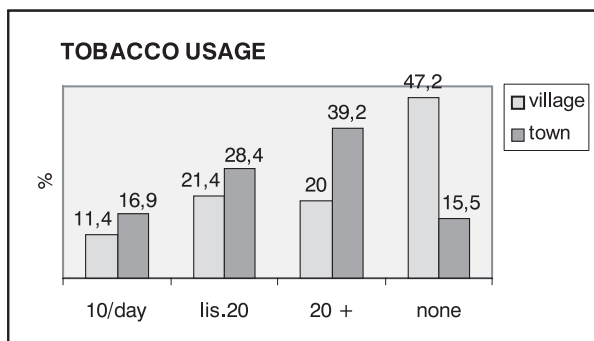
58.6% of the interviewees from rural area are confirming pathological changes found in the last gynecological examination, while that percentage is somewhat lower in those from urban area (44.6%). Considerably greater percentage of the interviewees from rural area that are confirming existence of sexual infection that are shown through common phenomenon of *colpitis* (66%) related to the interviewees from urban area (33.5%) Graph # 4. & #5.

Graph 6.



When it comes to the abortus, 48.5% of the inquired women from the rural area, and 12.9 from the urban area, never had an abortus. 35.7% of the inquired women in the town had two abortus. (graph #6.)

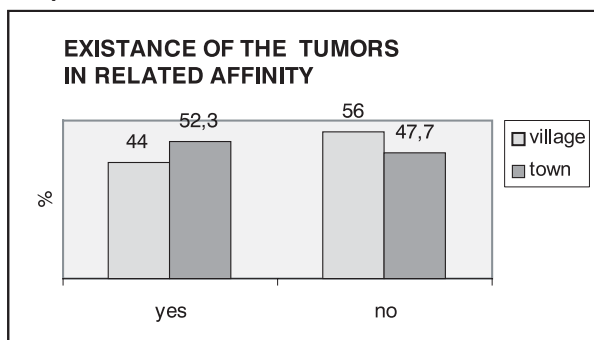
Graph 7.



Inquiring life styles within interviews, the strive was to consider consummation of tobacco and coffee as factors that are related to the appearance of the malignity, but as well as indention to the health in general.

As a certificate of all the above, another fact comes into place; 53% of the interviewees are using tobacco in rural area, in the town area almost 85%, which is leading us to the conclusion that almost half of them is smoking over a pack a day. Supplemental risk factor is consuming coffee that are, by their own statement, using 2-5 times a day (50-80% out of all surveyed women). (Graph #7.)

Graph 8.



Inquiring the existence of tumors in relater affinity (mother, sister, grandmother, aunts), it is representable that in 44% interviewees in rural area and 52.3% in urban area exists a "positive genetically factor" that interviewees are additionally burdened with the additional existence of another risk factors that are responsible for development of tumor for the reproductive organs.

## DISCUSSION

According to the results, we can see that the most of the predisposing factors from cervical cancer development, exists also within women from county of Stolac, with the mildew deviations related to the village-town situation. Considering variables that were questioned, each of them was observed from the aspect of the possible connection with the development of tumor. Considering that the most number of interviewees ( in town as well as in vil-

lage) was in the age of 35-44; so we can say that this accidentally chosen sample has high grade of risk. According to the so far researches, here as well as through out world this age group is mostly stroke by cervical cancer. When we asked a question about present during the war In Bosnia, we wanted to establish presence of stress as a risk factor for most of the tumor. Large number of interviewees( 90 % in rural, 83% in urban area) spent the war in refugee camps in Bosnia, so we can conclude that interviewees are from that aspect in group with high risk . Most interesting and most alarming in this research is the fact that greatest percentage of woman from both areas do not visit gynecologist. It is related to the fact that woman from both areas have some kind has some kind of pathological changes found with-in last consultation with a medical doctor. In the urban area around 44 % of interviewees had more than one sexual partner while in rural area that percentage was somewhat lower ( around 25%) what is applying to the possibility of HPV infection (7) ., which is risk factor number one for development of cervical cancer. Additional burden is a fact about existence of vaginal infections in 66% interviewees from rural area and 35% from urban area.

Considering that, each long-term chronically infection may predispose tumor. It is very interesting that in intercourse large number of interviewees does not use any kind of protection from undesired pregnancy and STD, and of those that are using, the most common " weapon" is a pill that is not providing any kind of protection. also there are unreliable in prevention of undesired pregnancy. It is common knowledge knowledge connection between long-term usage of those methods and development of breast cancer. Researching life styles , we proved that the usage of tobacco, coffee is highly presented with-in interviewees from both sides . High percent pf interviewees that are not using tobacco ( from the village) as well as lower usage of tobacco at all, comparing to urban

area. Around 50% interviewees from both sides has positive genetically factor ( it is established a tumor on reproductive organs in related affinity) whose significance is presentable.

## CONCLUSION

Definitely the presence of great number of risk factors in interviewed sample of fertile population, considering side of socio-political, economical and demographical factors in county of Stolac, on the other side, are making health care as a social problem evidently. Early detection of diseases on female reproductive organs almost doesn't existed . The reasons for that are: tradition, customs, elements of health culture as well as consequences of objective reasons ( dual politics and management in region functioned for almost decade ), therefore there are dual health institutions.

There are no gynecological service in the area of this county , therefore , for this kind of examination, one must go Mostar or ^apljina. We should not forget difficult existential circumstances considering for 40 % of the population is a refugee that came back in last 3-4 years on the territory of this county. Considering the question of presence of each risk factor , we can see the difference between rural and urban area in: tobacco usage, consistency of gynecological examination, number of sexual partners, abort uses; however the different is minimal when it comes to genetically factor. For all that has been said, the only way out when it comes to the efficient monitoring over the health of the population would be preventing and promoting work based on organizing periodical or aimed systematical examinations which would assure overload and dearly detection all diseases as well as disease of female reproductive organ.

Something like that could provide health care teams ( family doctor) considering territorial distribution ( one gynecologist / 30 000 livings)

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