

AN EXAMPLE OF COMMUNITY-BASED CERVICAL CANCER SCREENING

**Project of Cervical Cancer Research Conducted by Taking
Cervical Smear From Women Between the Ages 25-64 Residing in
the Region of Antalya Merkez Health Care Centre No. 13**

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Cervical cancer is observed to rank the fifth with a rate of 5.1 in a hundred thousand among women in Turkey and eighth with 3.9 in a hundred thousand in Antalya. The effectiveness of cervical smear analysis in cervical cancer control has been shown in studies carried out in various countries. Cervical cancer is the cancer, early diagnosis of which is the easiest and the cheapest with PAP smear test.

OBJECTIVE:

The objective is to reach the target female population by making studies together with primary health care services, to explain the importance of cervical cancer to the women reached and emphasize that it is a cancer which can be diagnosed early, to elucidate the importance of taking Pap-smear for early diagnosis, to spread Pap-smear sampling, and hence to lessen the mortality rate by ensuring the incidence of cervical cancer and its treatment via early diagnosis.

In line with this objective, community-based cervical cancer research program is being implemented by cervical smear sampling from women between the ages 25-64, residing in the region of Merkez Health Care Center No. 13.

MATERIAL - METHOD:

Antalya Merkez Health Care Center Number 13 was chosen as the research location since the Health Care Centre staff were willing. The

population of the region chosen is 18299 and 30.2 % (5525) of this population is composed of women between the ages 15-49. The population has not undergone much change for long years because the region is a shanty region and construction is forbidden. Socio-economic level of the people in the region is low and majority of them are not covered by any social security. Majority of those covered by social security is associated with the Social Security Institution (SSK). However, again majority of those not covered by any social security have green cards - health card for uninsured, poor individuals in Turkey.

Antalya Merkez Health Care Center No. 13 has been giving service to the people of the region since 1995. Willingness of the people to take service from the health care centre and to participate in the studies is high due to the fact that the region is far from the city centre and that number of the socially insured is low. Number of the people presenting to the Health Care Center is 200 per day on the average.

The research project was conducted according to the case flow diagram (Figure 1).

Training of health personnel: Theoretical and practical training on "Genital Organ Cancers and Smear Sampling" was given by KETEM physicians to the Health Care Centre personnel.

Public education: Trainings on "reproductive health, genital organ cancers and screening program, breast self-examination" were given to the women invited to the Health Care Centre in small groups throughout the project.

Determination of the target population: It was decided after the literature survey that the target population of the research project was the women residing in the Region of Antalya Merkez Health Care Center No 13 (Kepezalti, Ünsal and Santral quarters), between the ages 25-64, sexually active, not having any finding related to cervical cancer and willing to participate to the research (Table 1).

The list of married women between the ages 25-64 were derived from Health Care Centre's Household Identification Forms (ETF) of 2005 by the centre's midwives and the target population was determined to be 4101. However, it was determined as a result of the ETF study conducted by the Health Directorate on February, 2006 that the target population was **3760** women.

Home visits: All the women on the target population list were visited in their homes by the midwives of the Health Care Centre and were informed of the research and it was ensured that they received "**examination call invitation**" containing information on the purpose and method of the research. In addition, those who did not present on the day of invitation, although they were invited were communicated again.

I. Level examination and smear taking: Those presented to the Health Care Centre were informed again; **Informed Consent Form** was signed and the research form containing their personal information,

reproductive health story and examination findings was filled and smears were taken.

Dyeing and pathological analysis of smears: The smears taken were brought to KETEM by the Health Care Center personnel and were dyed by KETEM pathology technician. Cytological analyses were done by pathology specialists of Antalya State Hospital.

If the results of cytological analyses were normal, the people in question were informed to have this investigation for each three subsequent years. If the result was suspected, the person in question was invited to KETEM for colposcopic assessment. After this assessment, by consulting to the physicians of secondary health care institutions, people were guided to treatment if necessary.

FINDINGS - RESULTS:

Smear taking within the scope of the research was finalized at the end of December, 2006. The participation rate to smear taking among the determined target population in the research was 77.7 % (2923) (Table 1). Cytological assessments of 2835 (96.9 %) of the smear samples taken were conducted. In 90.6 % (2571) of the smear samples, cytology of which was evaluated, no atypical cell was determined. On the other hand, 10 (0.3 %) of them were evaluated as atypical squamous cells (ASCUS), significance of which could not be determined; 5 (0.1 %) of them as low level squamous intra-epithelial lesion (L-SIL) and 2 (0.07 %) of them as high level squamous intra-epithelial lesion (H-SIL) (Table 2). Colposcopy and biopsy were taken by adviser physician of the center, Specialist Physician İsmail Aydın from 9 of the 10 women determined to have intra-epithelial lesion and pathologic analyses were carried out. According to the result of pathologic analyses, one person was guided to conization and the other to the secondary health care institutions for treatment. Pathologic assessment of 88 (3.1 %) of the smears taken is being carried out. After the pathologic assessment is finalized, statistical data will be derived and definite results will be reached.

ADVICES:

It would be useful with regard to cost and efficiency to conduct cervical smear screening among risky groups rather than among wide numbers of people on community basis. Cooperation with secondary health care service institutions for the cytological analysis of smears taken in the first level would increase efficiency.

Figure 1. Case Flow Schema

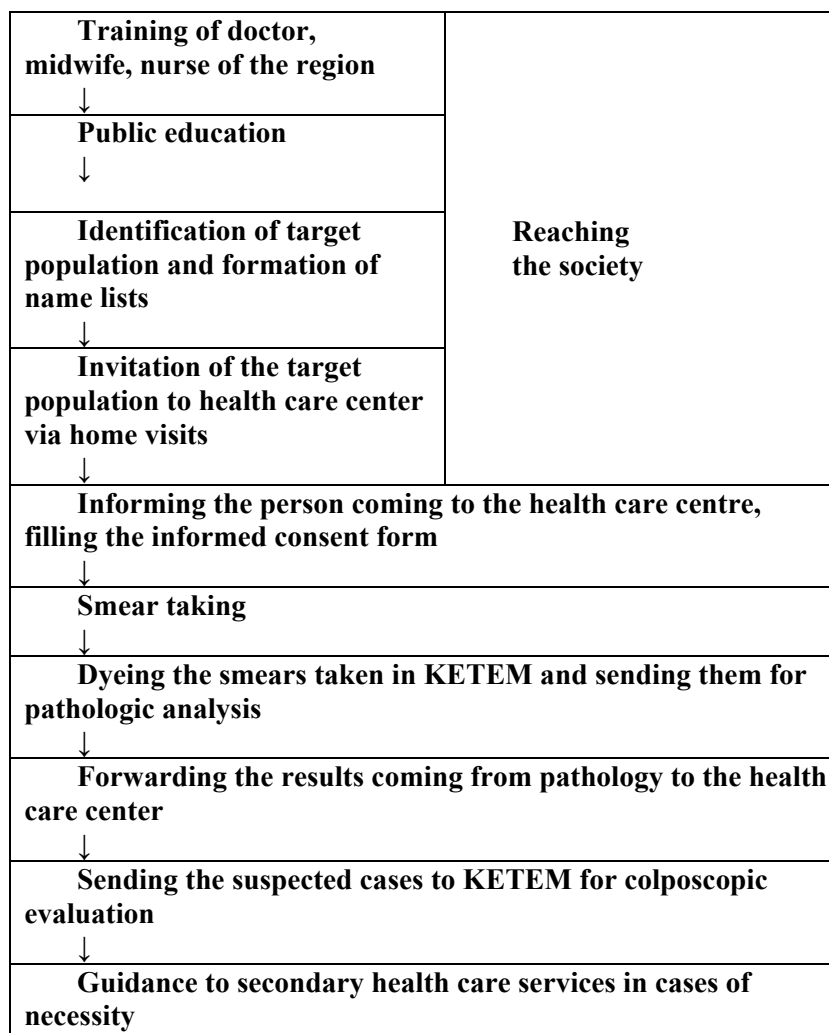


Table 1. Rate of reaching the target population according to quarters

Quarter name	Health care center name	Number of target women	Women from whom smear was taken		Number of women who refused smear test	Number of women from whom smear could not be taken	Women from whom smear could not be taken	
			No	%			No	%
Kepezaltı Quarter	Kepezaltı 1	424	210	49.5	200	14	214	50.5
	Kepezaltı 2	455	374	82.1	35	46	81	17.8
	Kepezaltı 3	314	314	100.0	0	0	0	0.0
	Kepezaltı 4	392	277	70.6	84	31	115	29.3
Santral Quarter	Santral 1	348	259	74.4	19	70	89	25.6
	Santral 2	414	350	84.5	10	54	64	15.5
	Santral 3	374	314	83.9	18	42	60	16.0
Ünsal Quarter	Ünsal 1	340	317	93.2	2	23	25	6.8
	Ünsal 2	341	234	68.6	91	16	107	31.4
	Ünsal 3	358	274	76.5	24	60	84	23.5
TOTAL		3760	2923	77.7	483	356	839	22.3

Table 2. Pathological analysis evaluation results of cervical smear samples, implemented procedure and advices

Assessment	No	%	Procedure implemented and advices
No atypical cell	2571	90.6	Annual smear control was advised
Bacterial Vaginosis	135	4.7	Treatment was given
Trichomonas Vaginalis	3	0.1	Treatment was given
Oestrogen Deficiency	9	0.3	Guided to menopause polyclinic
Reactive Cell Modifications	32	1.1	Treatment + control smear was advised
Squamous metaplasia	22	0.7	Control smear was advised for 6 months later
Candida infection	3	0.1	Treatment was given
Coccobacillus	43	1.5	Annual smear control was advised
ASCUS	10	0.3	3 colposcopy was done, 7 treatments + control smear was advised
L-SIL	5	0.1	Colposcopy was done
H-SIL	2	0.07	Colposcopy was done
No pathological result	88	3.01	
TOTAL	2923	100.00	

