



COALITION to STRENGTHEN
the HPV IMMUNIZATION
COMMUNITY



HPV Prevention
and Control Board



THE INCLEN TRUST INTERNATIONAL

Lessons learned from cervical cancer screening program: experience from Turkey

Present by:

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ESGO Prevention Committee Chair

South Asia Regional Meeting

HPV Prevention and Control Landscape and the way forward.

13th, 14th and 15th - Dec 2022 – New Delhi, India.

Volunteers Can Change The World

Since 2014
First Real Life Experience Showing a 10 Times Increase in
Coverage

- **Gynecol Oncol 2020 Jul;158(1):105-111.**
- **Bri J Cancer 2020 Jun 8**
- **Papillomavirus Res. 2019 Jun;7:118-122**
- **Int J Cancer 2018 May 1;142(9):1952-1958**
- **Lancet Infec Dis. 2017 Apr;17(4):368.**
- **J Gyn Oncol, 2017 Nov;28(6):e85.**
- **Int J Gyn Cancer, 2017 Oct;27(8S):S1-S9.**

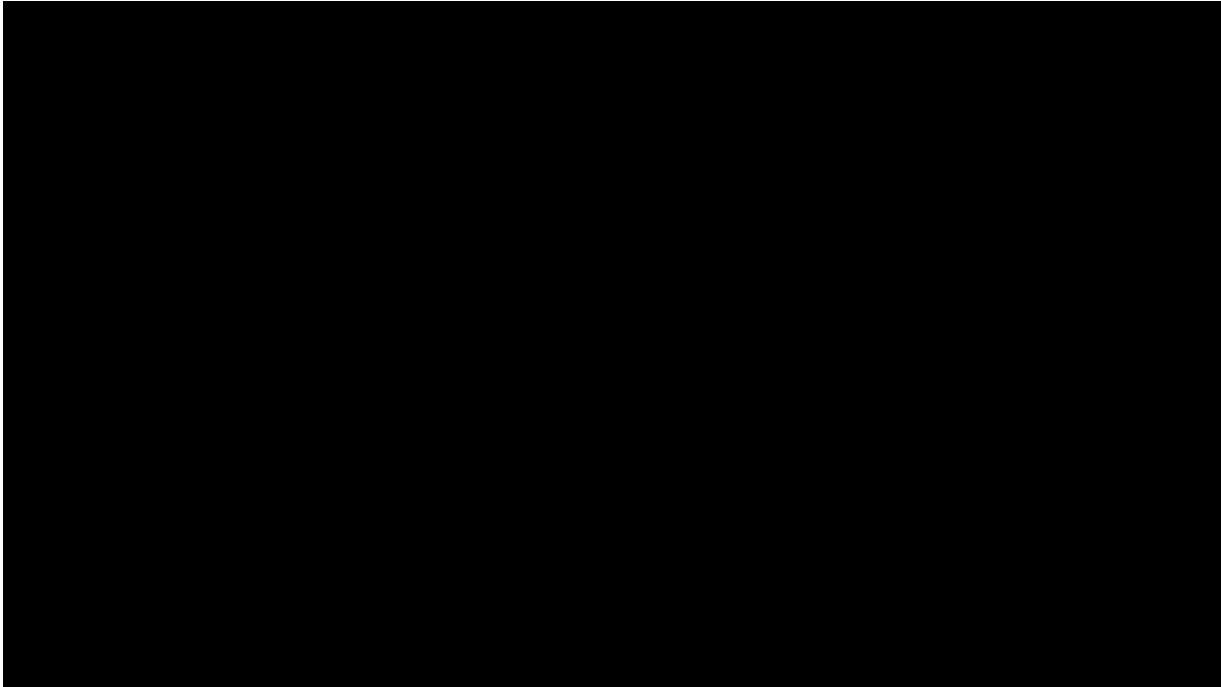
- **MEGA HPV Lab**
<https://www.youtube.com/watch?v=IBmAflRjl10>
- **GP Training**
<https://www.youtube.com/watch?v=ptpICnVtr7Q>
- **E-HPV Applications**
<https://hpvtarama.saglik.gov.tr/duyurular/sonucorgula>
Apple and Google Stores

Turkish Program

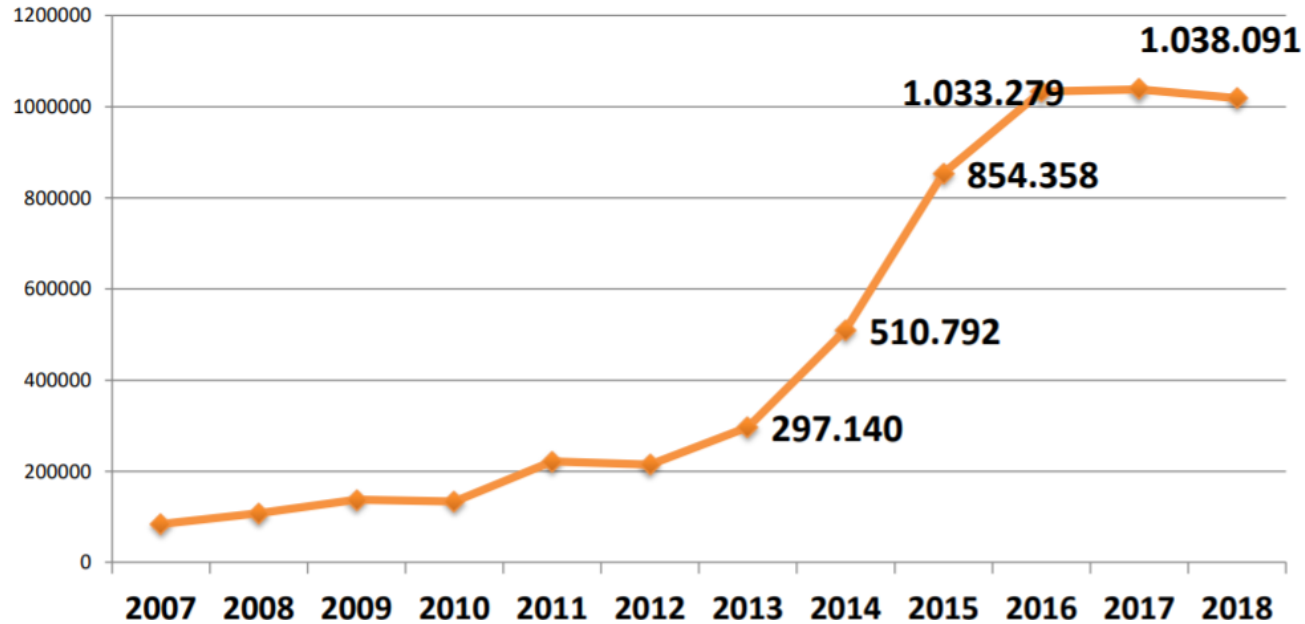
- **Untill 2014**
 - Age over 30, Pap-Smear in each 5 years
 - Never reached to 5% coverage
- **Problems...**
 - Man-power inadequate
 - Quality assurance was absent
 - Poor attendance by patients

Turkish Program

- **After 2014...**
 - Age over 30, HPV Plus Conventional Pap Smear
 - If HPV negative, pap-smears are not evaluated
 - 16/18 or Pap-Smear Abnormality is referred to colposcopy
 - Out Source Tendering (per patient payment to a company)
 - Digital images and HPV samples are collected for 5 years
 - Now, we have 90% coverage



Results: Population Based Cancer Screening



Instantaneous Monitorization

HPV POZİTİFLİK ORANLARI TÜRKİYE HARİTASI (GENEL POZİTİF YUZZDESİ : 4,78)

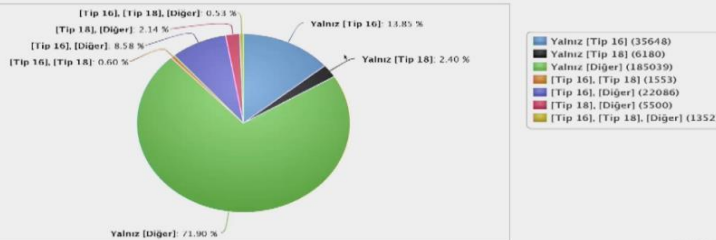
Türkiye Genel Pozitif Sayıları Dağılımı



- HPV Positivity 4.78%
- Colposcopy Referral 1.6%
- Cancers Prevented >12.000
- Coverage Rate 40 + 50 90%
- Attendance Rate 90% for face to face invitations

Genel Toplam HPV Test Genotiplendirme Sayıları(268497)

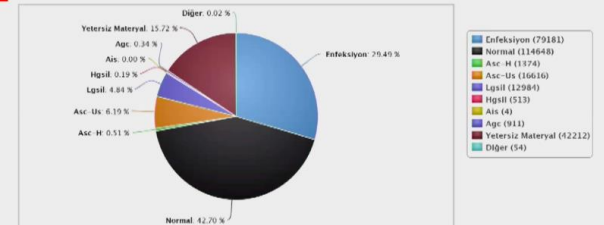
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Tarama başlama tarihi 01.08.2014

Genel Toplam HPV Test Servikal Sitoloji Sayıları(268497)

20.4.2021 13:53:49 tarihinin verileridir.



Tarama başlama tarihi 01.08.2014

Triage After 4 Million Screening

Genotype	Normal	CIN1	CIN2	CIN3	Cancer	≥CIN2	PPV % ≥CIN2
Any HPV	2830	1020	359	506	94	959	18.8
Only HPV 16	568	246	114	254	54	422	32.6
Only HPV 18	134	46	17	11	8	36	15.3
Only HPV31	153	46	25	24	2	51	19.3
Only HPV33	20	18	9	12	0	21	34.4
Only HPV35	62	17	8	6	0	14	14.0
Only HPV39	100	22	9	2	0	11	7.5
Only HPV45	55	12	6	3	4	13	15.3
Only HPV51	188	66	11	11	2	24	8.2
Only HPV52	99	39	10	7	1	18	10.8
Only HPV56	105	38	3	5	0	8	5.1
Only HPV58	65	30	8	6	0	14	12.0
Only HPV59	50	17	2	3	1	6	7.6
Only HPV68	74	27	2	3	0	5	4.3
Only HPV73	0	0	0	0	0	0	0.0
Other Type (not oncogenic)	394	122	33	14	4	51	619
Other Type (not oncogenic) and normal smear	278	63	17	9	2	28	408
Any HPV (+) and Smear Triage							
≥ASC-US	696	372	153	208	44	405	26.4
≥LSIL	492	285	119	152	25	296	26.4
≥HSIL	26	21	24	48	13	85	61.6
Other Scenarios							
HPV16,18 and or Other HPV(+) with abnormal smear ≥ASC-US (Current Turkish Triage)	1638	708	285	436	86	807	24.3
HPV16 and/or 18 (whatever the smear is)	1180	460	209	377	78	664	27.3



New Turkish Data

- ✓ 81 Province, Colposcopy Clinics
- ✓ Prospective Data (Feb 2018-February 2019)
- ✓ N= 9.808 patients

	Colposcopy Needed, n(%)	No Need for Colposcopy , n(%)
	5751 (58,6)	4057 (41,4)
Age (yrs), mean ± standard deviasyon	42,6±8,6	43,6±8,9
30-40 years	2806 (48,8)	1769 (43,6)
41-50 years	1771(30,8)	1278 (31,5)
51-65 Years	1174 (20,4)	1010 (24,9)
Colposcopy , n(%)	5579 (97)	3657 (90,1)
Adequate Colposcopy	3725 (66,8)	2391 (65,4)
Punch Biyopsy	4455 (79,9)	2790 (76,3)
Punch Biyopsiy Numbers		
1	1345 (30,5)	1013 (36,3)
≥2	3068 (69,5)	1742 (63,7)
ECC	3194 (57,1)	1957 (53,2)
See and Treat (LEEP e)	433 (7,7)	217 (5,9)
Final Pathology		
≤ CIN-2	3811 (86,1)	2752 (95,4)
≥ CIN-3	616 (13,9)	130 (4,6)
Serviks Ca	61 (1,4)	13 (0,5)



Punch Biopsy

	Colposcopy Needed, n(%) 5751 (58,6)		Colposcopy Not Needed, n(%) 4057 (41,4)	
	Number of Punch Biopsies		Number of Punch Biopsies	
	1	≥2	1	≥2
Punch Biopsy Result				
≤ CIN-1	983 (29,3)	2368 (70,7)	845 (37,4)	1411 (62,6)
CIN-2	72 (25,7)	208 (74,3)	40 (31,2)	78 (68,8)
≥ CIN-3	129 (25,9)	368 (74,1)	23 (23,9)	73 (76,1)
Serviks Ca	16 (28,6)	36 (71,4)	5 (41,7)	7 (58,3)



Treatment

	CIN-1, n(%)	CIN-2, n(%)	≥CIN-3, n(%)
Follow-Up	1182 (87,7)	165 (46,3)	143 (26,4)
Treatment			
LEEP (After Punch)	93 (6,9)	70 (19,7)	70 (12,9)
Cold Conization	12 (0,9)	71 (19,9)	146 (27,0)
Hysterectomy	7 (0,5)	6 (1,7)	54 (10,0)
Cryotherapy	1 (0,1)	0 (0,0)	1 (0,2)
LEEP (See and Treat)	13 (1,0)	21 (5,9)	52 (9,6)
Other	40 (3,0)	23 (6,5)	75 (13,9)
Total	1348 (100)	356 (100)	495 (100)



Challenges

- ✓ No Vaccine
- ✓ Poor Colposcopy Performance
- ✓ HPV Awareness and Discussions
- ✓ Self tests ??

Lessons Learned

- ✓ More efficient
- ✓ More cost effective
- ✓ GP Motivation
- ✓ National cheaper kits

CarciScan I test product summary



Description	Summary
Sample Type	CarciScan Preservation Medium
Required sample volume (µL)	100 to 1,200 µL (60 ng gDNA)
Internal cellular control	G6PDH (HEX)
Simultaneous 16/18 genotyping	Yes
Genotypes	16, 18, Other (31, 33, 45, 52)
Test duration	<4 hours



CarciScan II test product summary



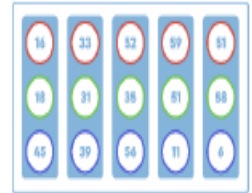
Description	Summary
Sample Type	CarciScan Preservation Medium
Required sample volume (µL)	100 to 1,200 µL (180 ng gDNA)
Internal cellular control	G6PDH (HEX)
Simultaneous 16/18 genotyping	Yes
Genotypes	16, 18, Other (31, 33, 45, 52)
Test duration	<4 hours



CarciScan III test product summary



Description	Summary
Sample Type	CarciScan Preservation Medium
Required sample volume (µL)	100 to 1,200 µL (300 ng gDNA)
Internal cellular control	G6PDH (HEX)
Simultaneous 16/18 genotyping	Yes; All 15 HR-HPV types
Genotypes	6, 11, 16, 18, 31, 33, 35, 39, 45, 39, 45, 51, 52, 56, 58, 59
Test duration	<4 hours



**THANK YOU FOR YOUR
ATTENTION**

HPV: A VIRUS WE

ALL

CAN BEAT