8th Anusandhan Trust's Krishna Raj Memorial Lecture

The Golden Rule: A Remedy for Decadence in Global Health

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Founder/President/Executive Director The Viet/American Cervical Cancer Prevention Project San Francisco CA

Presenter disclosures

I have no personal relationships with commercial interests relevant to this presentation.

I am an American taxpayer.

| Study location | Year started/ ended | Agent | Funder | Intervention | Design failures | Execution failures |
|-------------------|---------------------------|--------------|-----------|------------------|--|--|
| Mumbai | 1997/ 2015 | TMH | US NCI | Down- staging | Deliberately allowed human | Studied an obsolete intervention |
| | | | | None | beings to | falsification] |
| | | | Gates | VIA | die merely to contemplate questions | Effects resulted |
| Osmanabad | 1999/ 2007 | WHO/ IARC | | HC2® HPV | | from causes that did not |
| Osmanabad | | | | Pap smears | that had already | exist [?Data |
| | | | | None | been | falsification |
| Tamil Nadu | 2000/ | WHO/ | Gatac | VIA | answered | Irreproducible |
| Faiiiii Nauu | 2006 | IARC | Uales | None | | results |

DECADENCE: Tata Memorial Hospital, WHO/IARC, US NCI, and Gates Foundation deliberately allowed human beings to die merely to contemplate questions that had already been answered.

Delphi Exercise

REMEDY: Tata Memorial Hospital, WHO/IARC, US NCI, and Gates Foundation should embrace the Golden Rule of "improving health outcomes as rapidly as possible among as many people as possible," and assimilate the policy implications of the Golden Rule.

| ← | | Cervical s | screenina | | \longrightarrow |
|-----------|----------------|------------|-----------|-----------|-------------------|
| Cytology | LSIL | | HSIL | | |
| Histology | CIN 1 | CIN 2 | CI | N 3 | |
| | | | | | |
| | Very Mild/ | Moderate | Severe | In Situ | Invasive |
| Normal | Mild Dysplasia | Dysplasia | Dysplasia | Carcinoma | Carcinoma |
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HPV Infection

Cervical screening prevents cervical cancer by detecting and treating pre-cancerous lesions before they progress to cancer.



Visual screening tests (VIA) (introduced during 1930s)

Pap cytology smears (introduced during 1940s)

Human papillomavirus tests (HPV) (introduced during 1990s)

CERVICAL CANCER INCIDENCE RATES, 1947-2008

■ USA (population ~314M) ■ Ho Chi Minh City (population ~9M)



U.S. Preventive Services Task Force Search USPSTF

Search

Effectiveness of Early Detection and Treatment

Introduction of screening to populations naive to screening reduces cervical cancer rates by 60% to 90% within 3 years of implementation (19). The reduction of mortality and morbidity associated with the introduction of cytology-based screening is consistent and equally dramatic across populations. Correlational studies of cervical cancer trends in countries in North America and Europe demonstrate dramatic reductions in incidence of invasive cervical cancer and a 20% to 60% reduction in cervical cancer mortality since the onset of widespread screening.

No published studies have evaluated, in an ideal way, the age at which to begin screening, the age at which to end screening, and how often to screen. The USPSTF considered the following types of evidence to determine when screening for cervical cancer should begin: incidence, prevalence, and mortality of cervical cancer in young



U.S. Preventive Services Task Force

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You Are Here: U.S. Preventive Services Task Force > Topic Index > Counseling: Tobacco Use > Recommendation Statement

Counseling to Prevent Tobacco Use and Tobacco-Caused Disease

Recommendation Statement

This statement summarizes the current U.S. Preventive Services Task Force (USPSTF) recommendation on counseling to prevent tobacco use and tobacco-caused disease and the supporting scientific evidence, and updates the 1996 recommendation contained in the *Guide to Clinical Preventive Services*, Second Edition.

The information found here is current for children and adolescents. This recommendation has been updated in part for adults and pregnant women. Go to http://www.uspreventiveservicestaskforce.org/uspstf/uspstbac2.htm to view the new recommendation for adults and pregnant women, published in April 2009.

Summary of Recommendations

• The USPSTF strongly recommends that clinicians screen all adults for tobacco use and provide tobacco cessation interventions for those who use tobacco products.

Rating: A Recommendation.

Screening for Cervical Cancer

This topic page summarizes the U.S. Preventive Services Task Force (USPSTF) recommendations on screening for cervical cancer.

Current Recommendation

Release Date: March 2012

These recommendations apply to women who have a cervix, regardless of sexual history. These recommendations do not apply to women who have received a diagnosis of a high-grade precancerous cervical lesion or cervical cancer, women with in utero exposure to diethylstilbestrol, or women who are immunocompromised (such as those who are HIV positive).

The USPSTF recommends screening for cervical cancer in women ages 21 to 65 years with cytology (Pap smear) every 3 years or, for women ages 30 to 65 years who want to lengthen
the screening interval, screening with a combination of cytology and human papillomavirus (HPV) testing every 5 years. See the Clinical Considerations for discussion of cytology
method, HPV testing, and surgening interval.

Grade: A Recommendation.

- The USPSTF recommends against screening for cervical cancer in women younger than age 21 years. Grade: D Recommendation.
- The USPSTF recommends against screening for cervical cancer in women older than age 65 years who have had adequate prior screening and are not otherwise at high risk for cervical cancer. See the Clinical Considerations for discussion of adequacy of prior screening and risk factors

Search USPSTF

Search

cytology staff for their help; Mrs Jean Cunningham for help in interviewing; and the Nottingham District Health Authority for financial support.

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family practitioner committees would assist this. Such linkage is of course essential if active call and recall systems are to be implemented to initiate screening. Linkage between districts to maintain continuity when patients move is also necessary.

To ensure effective and efficient management of all women found to have abnormalities on screening must be a priority, even before attempts to extend the coverage of first or subsequent screening examinations. We find our results disquieting as we believe the situation in Nottingham is likely to be better than in many other districts. Indeed, even to show the difficulties of follow up requires a fairly good records system. Most of the problems could be overcome by an appropriate computer based records system being set up in the cytology laboratory, linked ideally to family practitioner committee records, and some modifications in the ways cervical smears are requested and reported.

We thank the patients, the general practitioners, and medical records and (Accepted 26 July 1984)

References

1962:311-20

Organisation of a programme for cervical cancer screening

ICRF COORDINATING COMMITTEE ON CERVICAL SCREENING

There are now good grounds for believing that a well organised programme of cervical cytological screening would lead to a substantial reduction in mortality from invasive cancer of the cervix.15 In those Scandinavian countries that have such a programme the incidence of invasive disease has fallen by up to half of 1965 levels while otherwise similar countries without organised programmes (including the United Kingdom) have experienced either a negligible fall or a rise over the same period, despite a similar number of smears taken per woman. Nevertheless, Britain has a well designed policy for cervical screening centred on the proposal that all women in the age range at risk should be examined at five year intervals. The central policy could be implemented within the existing resources devoted to screening if there were an effectively managed screening programme.*

Hitherto all that has been done is to publish the policy, provide arrangements for recalling at five year intervals those women who have had a smear, and try to discourage the too frequent examination of younger women by restricting payment to GPs to those examinations that conform with the policy on age and frequency of screening. These arrangements have not been very successful: most smears have been taken from young women with a recent history of previous examination, while many older women have not been screened at all, and there remains a particularly poor coverage of those who are known to be at particularly high risk.

We think that the time is opportune to recommend a more organised and systematic approach to cervical screening. The timing of such a proposal is enhanced by the decision to discontinue the national recall scheme and by the development of computer based administrative procedures for family practitioner committees.

The particular problems

At present screening tends to be applied differentially to women at least risk of developing cervical cancer while leaving those at

Imperial Cancer Research Fund, London WC2A 3PX

Members of the committee: Walter Bodmer, Jocelyn Chamberlain, Gary Cook, Jack Cuzick (Secretary), Gerald Draper, Stephen Erskine, Hugh Fisher, Rod Griffiths, David Haran, Christine Havelock, E G Knox, Ann McPherson, Alwyn Smith, Arthur Soriges, D Innes Williams (Chairman), Margaret Wolfendale

Correspondence to: Dr J Cuzick, Imperial Cancer Research Fund, PO Box No 123, Lincoln's Inn Fields, London WC2A 3PX

high risk largely unscreened. The considerable published work on the reasons for this may be summarised as follows:

(a) most cytological examinations are performed during examinations carried out for obstetric or contraceptive purposes and women in the age range of maximum risk (40 and over) are therefore relatively neglected.

(b) the length of the prescribed screening interval and the lack of clear and well publicised arrangements for undergoing examination lead to women neglecting or forgetting to obtain a smear.

Nevertheless, there is no good evidence that women in the high risk categories are reluctant to accept examination if suitable arrangements are made

Desiderata of a successful service

Examination of the successful Scandinavian screening programmes based on the use of updated computerised listings of the target population, an initiative from the service to arrange appointments for examination, and properly managed arrangements for further investigations of abnormal cytological findings, suggests that a successful service has at least seven requirements:

(1) adequate resources for taking, examining, and reporting on smears; (2) arrangements for making and keeping appointments for examination:

(3) arrangements acceptable to women for the actual taking of smearsfor example, the availability of choice between one's own GP or a clinic staffed by women:

(4) an updatable listing of women in the target population which can achieve complete initial call of all eligible women and ensure regular recall; (5) an informed client population whose members know and understand

the function of the procedure (6) a continuing scrutiny of the records of examinations to ensure that

appropriate actions are taken on the results; (7) the ability to monitor the efficiency and effectiveness of the

programme and to adjust policies and procedures accordingly.

The requirements are not unlike those for a well managed programme of immunisations for infants and young children, for which computer aided management has been very successful. All that has been lacking is a suitable database.

The computerisation of the family practitioner committee lists of GPs and patients offers a potentially useful database in England and Wales. A much less satisfactory database might eventually be compiled from the records of those who have already had cervical

"With the exception of stopping the population from smoking, cervical cytological screening offers the only major proved public health measure for significantly reducing the burden of cancer today."

Imperial Cancer Research Fund. BMJ, 1984

Papanicolaou Screening in Developing Countries

An Idea Whose Time Has Come

Eric J. Suba, MD,¹ and Stephen S. Raab, MD,² on behalf of the Viet/American Cervical Cancer Prevention Project

Key Words: Papanicolacu screening; Developing countries; Cervical cancer; HPV vaccines; Visual cervical screening; Direct visual inspection (DVI); Visual inspection with acetic acid (VIA); HPV screening; Quality assurance/improvement

DOI: 10.1309/G40XQBWNPV7MK9TY

Abstract

Cervical cancer is the leading cause of cancerrelated death among women in developing countries. Although progress is optional in all settings, Papanicolaou screening is feasible anywhere that cervical screening is appropriate and should be implemented without further delay in high-risk communities with access to curative treatment services. Successful prophylactic cervical cancer vaccines, prospects for which remain uncertain, will not eliminate requirements for cervical screening. The feasibility of human papillomavirus test analysis has not been demonstrated in low-resource developing country settings. Because past failures of cervical screening in developing countries are attributable to failures in programmatic quality rather than to technological limitations of the screening test, a shift in paradigmatic focus from technology toward quality is mandatory. Because visual screening techniques coupled with immediate ablative treatment are rendered obsolete by an embedded auality-control paradox, a moratorium should be placed on all such programs. Considerable opportunity costs, borne by the underserved, are associated with prioritizing research of novel interventions in developing countries when satisfactory interventions already exist.

Cervical cancer is the leading cause of cancer-related death among women in developing countries, where more than 80% of new cases of cervical cancer occur.¹ The impact of this disease is likely to increase over time. As recently publicized by the World Health Organization, global cancer rates could increase 50% by the year 2020.² Introduction of conventional Papanicolaou cytologic (Pap) screening services to populations naive to screening reduces cervical cancer rates by 60% to 90% within 3 years of implementation; these reductions of incidence and mortality are consistent and dramatic across populations.³ On a global scale, the Pap test is, therefore, the "single best cancer screening procedure"² and cervical cancer the most preventable form of cancerrelated death among women.

Technological and Sociopolitical Issues

In general, past failures of Pap screening in developing countries can be related directly not to technological limitations of the screening test but to failures to achieve adequate quality in one or other programmatic components.⁴ Sociopolitical obstacles to the achievement of adequate programmatic quality are prevalent; for example, incentives exist to screen more affluent women at low risk for disease. Solutions to sociopolitical obstacles have led to documented decreases in cervical cancer incidence.⁵ In contrast, technological improvements to the conventional Pap test (including liquidbased monolayer and human papillomavirus [HPV] testing) have not been associated with improved long-term clinical outcomes in any setting⁶ and are unlikely to be associated "We maintain that inclusion of a no screening arm in such a randomized trial is problematic, because any negative findings from that arm will not be generalized to other settings, and any positive findings from that arm will be considered redundant."

> Suba EJ, Raab SS. AJCP, March 2004

Am J Clin Pathol 2004;121:315-320 315 DOI: 10.1309/G40XQBWNPV7MK9TY

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"Women enrolled in noscreening arms of randomized trials comparing cervical screening with no screening should be reassigned to screening arms without further delay." Suba EJ, Raab SS. AJCP, March 2004

Am J Clin Pathol 2004;121:315-320 315 DOI: 10.1309/G40XQBWNPV7MK9TY IARC Handbooks of Cancer Prevention, Volume 10 - Cervix Cancer Screening, Lyon, 20-27 April 2004

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ETHICAL CHALLENGES IN THE DECEASED ORGAN DONATION PROGRAMME: ASIAN PERSPECTIVE

US-funded measurements of cervical cancer death rates in India - scientific and ethical concerns

Establishing institutional ethics committees: challenges and solutions

Ethical blind spots of a Tuskegee scientist

US-funded measurements of cervical cancer death rates in India: scientific and ethical concerns

ERIC J SUBA (ON BEHALF OF THE VIET/AMERICAN CERVICAL CANCER PREVENTION PROJECT, 2295 VALLEJO STREET, SUITE 508, SAN FRANCISCO, CALIFORNIA 94123)

Response to an article titled "US-funded measurements of cervical cancer death rates in India: scientific and ethical concerns" by Eric Suba, published online on April 17, 2014 in the *Indian Journal of Medical Ethics*

RENGASWAMY SANKARANARAYANAN', BHAGWAN M NENE', SURENDRA SHASTRI', PULLIKOTIL EKKURU ESMY', RAJAMANICKAM RAJKUMAR', RICHARD MUWONGE', RAJARAMAN SWAMINATHAN', SYLLA G MALVI', SHUBADA KANE', SANGEETA DESAI'', ROHINI KELKAR'', SANJAY HINGMIRE'', KASTURI JAYANT''

Response by Eric Suba to Sankaranarayanan et al

ERIC J SUBA, ON BEHALF OF THE VIET/AMERICAN CERVICAL CANCER PREVENTION PROJECT

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"High-quality screening must be provided to all surviving unscreened women without further delay....Those who suffered avoidable harm and death, as well as their families, should be promptly and fairly compensated."

Suba EJ. Ind J Med Ethics, 2014



EARLY DETECTION OF CERVICAL CANCER BY VISUAL INSPECTION: A POPULATION-BASED STUDY IN RURAL INDIA

B.M. NENE¹, S. DESHPANDE², Kasturi JAYANT¹, Atul Madhukar BUDUKH¹, P.S. DALE¹, D.A. DESHPANDE¹, Aruna S. CHIWATE¹, Sylla G. MALVI³, S. DEOKAR⁴, D. Maxwell PARKIN⁵ and Rengaswamy SANKARANARAYANAN^{5,*}

³Tata Memorial Centre Rural Cancer Project, Nargis Dutt Memorial Hospital, Barshi, Maharashtra, India; ²Barshi Maternity and General Co-operative Hospital, Barshi, India; ³Department of Cytopathology, Tata Memorial Hospital, Mumbai (Bombay), India; ⁴Primary Health Centre, Agalgaon, Barshi, India; and ⁵Unit of Descriptive Epidemiology, International Agency for Research on Cancer, Lyon 07, France.

"Our results make it appear highly unlikely that unaided visual inspection could be a useful procedure for control of cervical cancer."

"The logistics of implementing visual cervical inspection are considerable, and the input required may not be much inferior to that required for a cytology programme."

Nene BM, Sankaranarayanan R, et al. Int J Cancer, 1996



Veterans and Zombies

The Hype Behind the Health Care Scandal

JUNE 19, 2014



Paul Krugman

2008 Nobel Laureate in Economic Sciences You've surely heard about <u>the scandal</u> at the Department of Veterans Affairs. A number of veterans found themselves waiting a long time for care, some of them died before they were seen, and some of the agency's employees falsified records to cover up the extent of the problem. It's a real scandal; some heads have already rolled, but there's surely more to clean up.

As you might guess, conservatives don't like the observation that American health care performs worse than other countries' systems because it relies too much on the private sector and the profit motive. So whenever someone points out the obvious, there is a chorus of denial, of attempts to claim that America does, too, offer better care. It turns out, however, that such claims invariably end up <u>relying on zombie arguments</u> — that is, arguments that have been proved wrong, should be dead, but keep shambling along because they serve a political purpose.

The argument that Pap screening is not feasible/desirable in countries such as India is a Zombie Argument.



Its political purpose is to transmute public-health interests into research and commercial interests.

Zombie Arguments in Global Health

"I would be loathe to recommend starting a screening program with conventional Paps in a country with no current screening program in place." *Richart RM, Columbia University*

"I agree." Sankararayanan R, WHO/IARC

Contemporary Ob/Gyn, 2001

BILCOMELINDA GATES foundation

The Alliance for Cervical Cancer Prevention (which includes WHO/IARC and PATH Seattle) was established in 1999 with a gift of US \$50 million from the Bill and Melinda Gates Foundation.

The Alliance's central founding assumption: non-cytologic technologies, rather than Pap smear screening, are the most likely solution to the problem of cervical cancer in developing countries.

TRUTH:

"Although 95% of institutions at all health care levels in East, Central and Southern African countries had the basic infrastructure to carry out cervical cytology screening, only a small percentage of women were actually screened." *Chirenje ZM et al. Bull WHO*, 2001

ZOMBIE ARGUMENT:

"In our view, many low-income developing countries, particularly most of those in sub-Saharan Africa, currently have neither the financial and manpower resources nor the capacity in their health services to organize and sustain a screening programme of any sort." *Sankaranarayanan R et al. Bull WHO, 2001*

TRUTH:

"Our results clearly show that good-quality cytology can implemented even in a rural setting of a developing country with reasonable investment."

Sankaranarayanan R et al. Int J Cancer, 2005

ZOMBIE ARGUMENT:

"The fact that population-based cytology screening is not feasible in India is not our invention....Eric Suba states that 'Papanicolaou screening is feasible anywhere that cervical screening is appropriate' which indicates that he has little understanding about the prevailing conditions in many low- and middle-income countries in sub-Saharan Africa, Central America, and South Asia." *Sankaranarayanan R et al. Ind J Med Ethics, 2014*

Effect of VIA Screening by Primary Health Workers: Randomized Controlled Study in Mumbai, India

Surendra S. Shastri, Indraneel Mittra, Gauravi A. Mishra, Subhadra Gupta, Rajesh Dikshit, Shalini Singh, Rajendra A. Badwe

Manuscript received August 13, 2013; revised December 20, 2013; accepted December 21, 2013.

Correspondence to: Surendra S. Shastri, MD, Rm No. 305, Service Block, Tata Memorial Centre, Parel, Mumbai 400012, India (e-mail: surendrashastri@gmail.com).

| Background | Cervical cancer is the leading cause of cancer mortality among women in India. Because Pap smear screening is not feasible in India, we need to develop effective alternatives. |
|------------|---|
| Methods | A cluster-randomized controlled study was initiated in 1998 in Mumbai, India, to investigate the efficacy of visual inspection with acetic acid (VIA) performed by primary health workers in reducing cervical cancer mortality. Four rounds of cancer education and VIA screening were conducted at 24-month intervals in the screening group, whereas cancer education was offered once at entry to the control group. The study was planned for 16 years to include four screening rounds followed by four monitoring rounds. We present results after 12 years of follow-up. Poisson regression method was used to calculate the rate ratios (RRs); two-sided χ^2 was used to calculate the probability. |

| Study location | Year started/ ended | Agent | Funder | Intervention | Design failures | Execution failures |
|-------------------|---------------------------|-------|--------|------------------|--------------------------|--|
| Mumbai | 1997/ | TMH | US | Down- staging | Deliberately allowed | Studied an obsolete intervention |
| Withfitial | 2015 | | NCI | None | human beings to | [?Data falsification] |
| Osmanabad | | | Gates | VIA | die merely | Effects resulted |
| | 1999/ | WHO/ | | HC2® HPV | contemplate questions | from causes that did not |
| | 2007 | IARC | | Pap smears | that had already | exist [?Data |
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| Tamil Nadu | 2000/ | WHO/ | Gates | VIA | answered | Irreproducible |
| Faiiiii Nauu | 2006 | IARC | Gales | None | | results |

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|-----------|----------------|------------|-----------|-----------|-------------------|
| Cytology | LSIL | | HSIL | | |
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| | | | | | |
| | Very Mild/ | Moderate | Severe | In Situ | Invasive |
| Normal | Mild Dysplasia | Dysplasia | Dysplasia | Carcinoma | Carcinoma |
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HPV Infection

Cervical screening prevents cervical cancer by detecting and treating pre-cancerous lesions before they progress to cancer.

| ← | - | Cervical s | screening | | \longrightarrow |
|-----------|----------------|------------|-----------|-----------|-------------------|
| Cytology | LSIL | | HSIL | | 1 |
| Histology | CIN 1 | CIN 2 | CI | N 3 | |
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HPV Infection

The most important quality of any cervical screening test is its disease detection rate for pre-cancerous lesions.

| Detection rates for pre-cancerous lesions (HSIL) in Mumbai | | | | | | | | |
|--|--|------------|---|--|--|--|--|--|
| Study setting | Intervention studied Principle Investigator | | Disease detection rate for pre- cancerous lesions | | | | | |
| Mumbai cross-sectional | VIA | Shastri SS | 0.9% | | | | | |
| TMH RCT Round 1 | VIA | TMH | 0.04% | | | | | |
| TMH RCT Round 2 | VIA | TMH | 0.02% | | | | | |
| TMH RCT Round 3 | VIA | TMH | 0.05% | | | | | |

Data sources: Shastri SS et al. Bull World Health Organ. 2005;83(3):186–94 Mittra I et al. Int J Cancer. 2010;126(4):976-84 Documents obtained through the US Freedom of Information Act show that the TMH RCT did not compare valid cervical screening to no-screening.

The TMH RCT compared "downstaging" (i.e. "visual inspection") to "nodownstaging."

Principal Investigator/Program Director (Last, first, middle): MITTRA INDRANEEL

i)

Of the 2 arms of the intervention trial, women in the study arm were to receive physical examination of the breast and teaching of BSE and visual inspection of the cervix. The visual examination of the cervix has now been modified, in view of the results of the Zimbabwe study (21) discussed above, and the cervix is painted with 2% acetic acid before examination so as to identify more reliably acetowhite patches as suspicious. However, the modification was implemented a few months after the study was started. So that out of 21,542 women in the intervention arm who were given an examination, only 15,755 women were screened by VIA (2% acetic acid).

The number of women in each arm has been augmented to 50,000 instead of the initial 35,000 proposed, to obtain sufficient number of breast and cervical cancer cases. The

| ← | | Cervical s | screening | | \longrightarrow |
|-----------|------------------------------|-----------------------|---------------------|----------------------|-----------------------|
| Cytology | LSIL | | Down- | | |
| Histology | CIN 1 | CIN 2 | CII | N 3 | staging |
| | | | | | |
| Normal | Very Mild/ Mild Dysplasia | Moderate Dysplasia | Severe Dysplasia | In Situ Carcinoma | Invasive Carcinoma |
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HPV Infection

"Downstaging" is an esoteric test that, by design, does not detect pre-cancerous lesions. No competent physician would recommend or adopt a cervical screening test that, by design does not detect precancerous lesions.



EARLY DETECTION OF CERVICAL CANCER BY VISUAL INSPECTION: A POPULATION-BASED STUDY IN RURAL INDIA

B.M. NENE¹, S. DESHPANDE², Kasturi JAYANT¹, Atul Madhukar BUDUKH¹, P.S. DALE¹, D.A. DESHPANDE¹, Aruna S. CHIWATE¹, Sylla G. MALVI³, S. DEOKAR⁴, D. Maxwell PARKIN⁵ and Rengaswamy SANKARANARAYANAN^{5,*}

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"Our results make it appear highly unlikely that unaided visual inspection could be a useful procedure for control of cervical cancer."

"The logistics of implementing visual cervical inspection are considerable, and the input required may not be much inferior to that required for a cytology programme."

Nene BM, Sankaranarayanan R, et al. Int J Cancer, 1996



| The TMH RCT studied an esoteric "downstaging" test that no competent physician would recommend or adopt | | | | | | | |
|---|--|------------|---|--|--|--|--|
| Study setting | Intervention studied Principle Investigator | | Disease detection rate for pre- cancerous lesions | | | | |
| Mumbai cross-sectional | VIA screening | Shastri SS | 0.9% | | | | |
| TMH RCT Round 1 | VIA downstaging | TMH | 0.04% | | | | |
| TMH RCT Round 2 | VIA downstaging | TMH | 0.02% | | | | |
| TMH RCT Round 3 | VIA downstaging | TMH | 0.05% | | | | |

Data sources: Shastri SS et al. Bull World Health Organ. 2005;83(3):186–94 Mittra I et al. Int J Cancer. 2010;126(4):976-84



By design, the TMH RCT withheld valid cervical screening tests from 151,538 women in both intervention and control groups during the 15-year period required for enough women to die from cervical cancer to assess whether an obsolete "downstaging" test, which could not reduce cervical cancer incidence rates, might nevertheless reduce cervical cancer mortality rates.



It is unlikely that any of the 151,538 subjects of the TMH RCT will ever receive valid cervical screening tests (i.e. tests that actually detect pre-cancerous lesions).



DEPARTMENT OF HEALTH & HUMAN SERVICES

Office of the Secretary Office of the Assistant Secretary for Health

Office for Human Research Protections The Tower Building 11101 Wootton Parkway, Suite 200 Rockville, Maryiand 20852 Telephone: 240-453-8132 FAX: 240-453-6909 E-mail: Kristina Borror&hk.soy

July 5, 2012

Dr. Anil K. D'cruz, M.S. Director Tata Memorial Hospital Dr. E. Borges Road Parel Mumbai, Maharashtra INDIA

RE: Human Research Protections Under Federalwide Assurance FWA-6143

<u>Research Project:</u> Early Detection of Common Cancers in Women in India <u>Principal Investigator:</u> Dr. Surendra Srinivas Shastri <u>HHS Protocol Number:</u> 5R01CA074801

Dear Dr. D'cruz:

Thank you for your June 4, 2012 report in response to our May 7, 2012 request that Tata Memorial Hospital (TMH) evaluate allegations of noncompliance with Department of Health and Human Services (HHS) regulations for the protection of human research subjects (45 CFR part 46). Based on review of your response, we make the following determinations:

A. Determinations regarding the above-referenced research

procedures or courses of treatment regarding screening for breast cancer or cervical cancer, namely, mammography and Pap testing. HHS regulations at 45 CFR 46.116(a)(4) require the disclosure of appropriate alternative procedures or courses of treatment, if any, that might be advantageous to the subject, as part of informed consent. The research study involved offering the subjects a form of screening for

breast and cervical cancer that is different from mammography and Pap testing which are considered the "gold standard" for such screening. It has been reported that the medical social worker responsible for obtaining the consent from subjects

Withholding valid cervical screening tests from 151,538 women for 15 years required informed consent procedures determined to be unethical by the US Office for Human **Research Protections. TMH** RCT subjects were not adequately informed of lifesaving differences between cervical screening, "downstaging," and noscreening.

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ETHICAL CHALLENGES IN THE DECEASED ORGAN DONATION PROGRAMME: ASIAN PERSPECTIVE

US-funded measurements of cervical cancer death rates in India - scientific and ethical concerns

Establishing institutional ethics committees: challenges and solutions

Ethical blind spots of a Tuskegee scientist

US-funded measurements of cervical cancer death rates in India: scientific and ethical concerns

ERIC J SUBA (ON BEHALF OF THE VIET/AMERICAN CERVICAL CANCER PREVENTION PROJECT, 2295 VALLEJO STREET, SUITE 508, SAN FRANCISCO, CALIFORNIA 94123)

Response to an article titled "US-funded measurements of cervical cancer death rates in India: scientific and ethical concerns" by Eric Suba, published online on April 17, 2014 in the *Indian Journal of Medical Ethics*

RENGASWAMY SANKARANARAYANAN', BHAGWAN M NENE', SURENDRA SHASTRI', PULLIKOTIL EKKURU ESMY', RAJAMANICKAM RAJKUMAR', RICHARD MUWONGE', RAJARAMAN SWAMINATHAN', SYLLA G MALVI', SHUBADA KANE', SANGEETA DESAI'', ROHINI KELKAR'', SANJAY HINGMIRE'', KASTURI JAYANT''

Response by Eric Suba to Sankaranarayanan et al

ERIC J SUBA, ON BEHALF OF THE VIET/AMERICAN CERVICAL CANCER PREVENTION PROJECT

Director, Clinical Laboratories, Kaiser Permanente Medical Center, 350 Saint Joseph Avenue, San Francisco, California 94115, USA e-mail: eric.suba@gmail.com

"To suggest, as do Sankaranarayanan et al, that Indian women would knowingly consent to be randomly assigned to more death – instead of to more life – is to suggest that Indian women are unimaginably stupid."

Suba EJ. Ind J Med Ethics, 2014

Principal Investigator/ Program Director (Last, first, middle): DINSHAW Ketayun A.

Improvement in Downstaging:

Table – 5: Staging of Cervix cancer cases at diagnosis (Intervention Arm)

| Screening Round | Stage (CIS + I +II) | Stage (III + IV) | Total |
|--|---------------------|------------------|-------|
| 1 st Screening (IC 1 – 10) | 07 (35%) | 13 (65%) | 20 |
| 2 nd Screening (IC 1 – 10) | 14 (50%) | 14 (50%) | 28 |
| 3 rd Screening (IC 1 - 6) | 09 (60%) | 06 (40%) | 15 |

Table 5. Staging at diagnosis (cervix-screening arm)

| Screening round | Early stage (0 + I + II) | Late stage (III + IV) | Staging not available | Total |
|------------------|-----------------------------|--------------------------|-----------------------------|-------|
| One | 16 (80.00%) | 4 (20.00%) | 0 | 20 |
| Interval cancers | 7 (58.33%) | 5 (41.67%) | 2 | 14 |
| Two | 10 (88.33%) | 2 (16.67%) | 0 | 12 |
| Interval cancers | 12 (60.00%) | 8 (40.00%) | 2 | 22 |
| Three | 17 (100.00%) | 0 | 0 | 17 |

Compared to data reported to US NCI in 2005 (obtained through US Freedom of Information Act; upper table), data published in 2010 (lower table) show higher percentages of early-stage cancers in the intervention arm. All discrepancies favor the study result sought by NCI-funded investigators: that DVI/VIA had caused downstaging. Reasons for discrepancies in total numbers of cases during each RCT round are unknown. The discrepancies were not acknowledged in publications from the NCI-funded study.

| Table – | 7: | Staging | of | Cervix | cancer | cases | at | diagnosis | (Control | Arm) |) |
|---------|----|---------|----|--------|--------|-------|----|-----------|----------|------|---|
|---------|----|---------|----|--------|--------|-------|----|-----------|----------|------|---|

| Health education / Surveillance Rounds | Stage (CIS + I +II) | Stage (III + IV) | Total |
|---|---------------------|------------------|-------|
| Round 1 (IC 1 – 10) | 03 (37.5%) | 05 (62.5%) | 08 |
| Round 2 (IC 1 – 10) | 06 (42.9%) | 08 (57.1%) | 14 |
| Round 3 (IC 1 - 6) | 06 (50%) | 06 (50%) | 12 |
| Round 4 (IC1 – 5) Ongoing | 02 (50%) | 02 (50%) | 04 |

 Table 6. Staging of symptomatic referrals at diagnosis (cervix-control arm)

| HE/monitoring rounds | Early stage (0 + I + II) | Late stage (III + IV) | Staging not available | Total |
|-------------------------|-----------------------------|--------------------------|-----------------------------|-------|
| One | 1 (14.29%) | 6 (85.71%) | 1 | 8 |
| Two | 9 (37.50%) | 15 (62.50%) | 4 | 28 |
| Three | 4 (33.33%) | 8 (66.67%) | 2 | 14 |

Compared to data reported to US NCI in 2005 (obtained through US Freedom of Information Act; upper table), data published in 2010 (lower table) show higher percentages of late-stage cancers in the control arm. All discrepancies favor the study result sought by NCIfunded investigators: that **DVI/VIA** had caused downstaging. Reasons for discrepancies in total numbers of cases during each RCT round are unknown. The discrepancies were not acknowledged in publications from the NCI-funded study.



Science (OPHS), paragraph ACA, Immediate Office, as last amended at 62 FR 5009-10, 2/3/97; and paragraph ACF, Office of Research Integrity (ORI), as last amended at 60 FR 56606-06, [Page 30601] dated November 9, 1995, are being amended to make policy changes approved by the Secretary. Specifically, the Notice is to reflect that the Assistant Secretary for Health (ASH) will make proposed findings of research misconduct and administrative actions in response to allegations of research misconduct involving research conducted or supported by components of the Public Health Service (PHS); that direct investigations, previously conducted by ORI, will be conducted by components of the PHS for intramural research and by the Office of Inspector General for extramural research; and that role and structure of ORI will be changed to focus more on preventing misconduct and promoting research integrity through expanded education programs. The changes are as follows:

I. Amend Chapter AC.20 Functions, paragraph A. "Office of Public Health and Science," paragraph titled, "The Immediate Office (ACA)" by adding the following new clause:

(1) Proposes findings of research misconduct and administrative actions in response to allegations of research misconduct involving research conducted or supported by the Public Health Service (PHS) OPDIVs, including reversal of an institution's no misconduct finding or opening of a new investigation.

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The US Office for **Research Integrity** is investigating credible allegations that data falsification may have nullified the scientific validity of the TMH RCT conclusion that "downstaging" reduced cervical cancer mortality rates.

Richard Horton, United Kingdom Editor-in-Chief The Lancet "Much of the scientific literature, perhaps half, may simply be untrue....The bad news is that nobody is ready to take the first step to clean up the system."

> Richard Horton Editor in Chief The Lancet April 11, 2015

| Study location | Year started/ ended | Agent | Funder | Intervention | Design failures | Execution failures |
|-------------------|---------------------------|-------|---------|------------------|---|--|
| Mumbai | 1997/ | TMH | US | Down- staging | Deliberately allowed | Studied an obsolete intervention |
| Withour | 2015 | | NCI | None | human beings to | [?Data falsification] |
| | | | | VIA | die merely | Effects resulted |
| Osmanabad | 1999/ WHO 2007 IARC | WHO/ | Gates | HC2® HPV | contemplate questions that had already | from causes that did not |
| | | IARC | | Pap smears | | exist [?Data folgification] |
| | | | | None | been | Taismcation |
| Tomil Nodu | 2000/ | WHO/ | Gatag | VIA | answered | Irreproducible |
| Faiiiii INadu | 2006 | IARC | C Gates | None | | results |

| Zombie Argument: Effects result from causes that do not exist | | | | | |
|--|---|-----|--|--|--|
| Osmanabad screening test | Disease detection Cervical cancer death rate reduction? | | | | |
| Pap smears | 1.0% | NO | | | |
| Hybrid Capture 2® HPV | 0.9% | YES | | | |

The Osmanabad RCT concluded that superior HPV test death-rate reduction was caused by superior disease detection.

That conclusion is absurd.

"The unexpected lack of correlation between detection rates reported for the screening tests and subsequent mortality rates requires careful consideration." *Suba EJ, Cibas ES, Raab SS. NEJM, July 2009*

"That HPV testing had a higher detection rate than that of cytologic testing or VIA is clear from our findings." *Sankaranarayanan R. NEJM, July 2009*

Disease detection rates:

HPV tests:0.9%Pap smears:1.0%

Zombie Argument: "That HPV testing had a higher disease detection rate than that of cytologic testing is clear from our findings." Sankaranarayanan R. NEJM, July 2009

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HPV Screening for Cervical Cancer in Rural India

Rengaswamy Sankaranarayanan, M.D., Bhagwan M. Nene, M.D., F.R.C.P., Surendra S. Shastri, M.D., Kasturi Jayant, M.Sc., Richard Muwonge, Ph.D., Atul M. Budukh, Ph.D., Sanjay Hingmire, B.Sc., Sylla G. Malvi, M.Sc., Ph.D., Ranjit Thorat, B.Sc., Ashok Kothari, M.D., Roshan Chinoy, M.D., Rohini Kelkar, M.D., Shubhada Kane, M.D., Sangeetha Desai, M.D., Vijay R. Keskar, M.S., Raghevendra Rajeshwarkar, M.D., Nandkumar Panse, B.Com., and Ketayun A. Dinshaw, M.D., F.R.C.R.

ABSTRACT

BACKGROUND

In October 1999, we began to measure the effect of a single round of screening by testing for human papillomavirus (HPV), cytologic testing, or visual inspection of the cervix with acetic acid (VIA) on the incidence of cervical cancer and the associated rates of death in the Osmanabad district in India.

METHODS

In this cluster-randomized trial, 52 clusters of villages, with a total of 131,746 healthy women between the ages of 30 and 59 years, were randomly assigned to four groups of 13 clusters each. The groups were randomly assigned to undergo screening by HPV testing (34,126 women), cytologic testing (32,058), or VIA (34,074) or to receive standard care (31,488, control group). Women who had positive results on screening underwent colposcopy and directed biopsies, and those with cervical precancerous lesions or cancer received appropriate treatment.

RESULTS

In the HPV-testing group, cervical cancer was diagnosed in 127 subjects (of whom 39 had stage II or higher), as compared with 118 subjects (of whom 82 had advanced disease) in the control group (hazard ratio for the detection of advanced cancer in the UNV testing group 0.47, 0.60, and 0.60, 20 to 0.60, 20

From the International Agency for Research on Cancer, Lyon, France (R.S., R.M.); and the Nargis Dutt Memorial Cancer Hospital, Tata Memorial Centre Rural Cancer Project, Barshi (B.M.N., K.J., A.M.B., S.H., S.G.M., R.T., A.K., V.R.K., R.R., N.P.), and the Tata Memorial Centre, Mumbai (S.S.S., R.C., R.K., S.K., S.D., K.A.D.) — both in India. Address reprint requests to Dr. Sankaranarayanan at the International Agency for Research on Cancer, 150 cours Albert Thomas, Lyon 69008, France, or at sankar@iarc.fr.

N Engl J Med 2009;360:1385-94. Copyright © 2009 Messochusetts Medical Society.

Disease detection rates:

HPV tests:0.9%Pap smears:1.0%

Zombie Argument: "That HPV testing had a higher disease detection rate than that of cytologic testing is clear from our findings." Sankaranarayanan R. NEJM, July 2009

Landmark Study in New England Journal of Medicine Shows HPV Testing Significantly Reduces Deaths from Cervical Cancer, Compared to other Methods Including Pap

QIAGEN donates one million tests to expand access to HPV screening in the world's poorest countries

Venlo, The Netherlands - **April 1, 2009** - Results from an eight-year trial involving more than 130,000 women published today in *The New England Journal of Medicine* (NEJM) demonstrate that in low-resource settings a single round of HPV testing significantly reduces the numbers of advanced cervical cancers and deaths, compared with Pap (cytology) testing or visual inspection with acetic acid (VIA). The trial used QIAGEN's (NASDAQ: QGEN; Frankfurt, Prime Standard: QIA) *digene* HPV Test, which detects high-risk types of human papillomavirus that cause cervical cancer.

"The implications of the findings of this trial are immediate and global: international experts in cervical-cancer prevention should now adapt HPV testing for widespread implementation," wrote Drs. Mark Schiffman and Sholom Wacholder of the U.S. National Cancer Institute in an editorial that accompanied the study in the NEJM. "The remarkable promise of the Indian trial presents a worthy global challenge to implement smart, regionally tailored strategies that will efficiently save millions of lives in the years ahead."

Following this milestone study, over the next five years QIAGEN will donate one million HPV tests, with a total estimated value of over US\$30 million (based on U.S. list prices), as part of its broader global access program to provide the highest quality cervical cancer screening technologies to women in developing countries. Nearly 300,000 women die of cervical cancer every year, with 80% of deaths occurring in developing countries.

QIAGEN's commitment to expanded access to HPV screening includes:

| Zombie Argument: Effects result from causes that do not exist | | | | | |
|--|---|-----|--|--|--|
| Osmanabad screening test | Disease detection Cervical cancer death rate reduction? | | | | |
| Pap smears | 1.0% | NO | | | |
| Hybrid Capture 2® HPV | 0.9% | YES | | | |

Zombie Arguments enabled the Osmanabad RCT to be the first study in world history to conclude that high-quality Pap screening does cause reductions in cervical cancer death rates.

That conclusion is absurd.

BILCOMELINDA GATES foundation

The Alliance for Cervical Cancer Prevention (which includes WHO/IARC and PATH Seattle) was established in 1999 with a gift of US \$50 million from the Bill and Melinda Gates Foundation.

The Alliance's central founding assumption: non-cytologic technologies, rather than Pap smear screening, are the most likely solution to the problem of cervical cancer in developing countries.



Executive editor: Co-editor-sin-chief: Vinod B, Shicham, MD, FRAZ, FROTham, Mortha DEMay, MD (Drivenity of Chiago, Chiago, USA) Medical College of Wiscoman, Vinod B, Shicham, MD, FRAZ, FROThat (Net College of Wi, Minaukee, USA) Vinod B, Shicham, MD, FRAZ, FROThat (Net College of Wi, Minaukee, USA) For entire Editorial Board visit : Mtp://www.cytojournal.com/kb.pdf OPEN ACCESS PDFs FREE for Members (visit http://www.cytojournal.com/kb.meter.asp) HTML format

View Point

Test group biases and ethical concerns mar New England Journal of Medicine articles promoting HPV screening for cervical cancer in rural India

R Marshall Austin*, Chengquan Zhao

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The study conclusions, released from prepublication embargo by the New England Journal of Medicine (NEJM) at 5:00 PM on April 1, 2009, were dramatic. "In a low resource setting, a single round of HPV testing was associated with a significant reduction in the numbers of advanced cancers or deaths from cervical cancer." Furthermore, the study abstract asserted, "No significant reductions in the numbers of associated deaths were observed in the cytology testing group or in the VIA group, as compared with the control group."^[1]

Simultaneously, at 5:00 PM on April 1, 2009, a press release from Qiagen, a Netherlands Holding Company and a manufacturer of the digene HPV test, stated: "Landmark study in New England Journal of Medicine shows HPV testing significantly reduces deaths from cervical cancer, compared to other methods including Pap."^[2] It is now known that the manufacturer received pre-embargo access to contents of the article and the accompanying editorial. The NEJM customer service office confirmed on April 14 that pre-embargo release was not from the journal.

A close look at the NEJM paper suggests that unexpected biases might have occurred in some of the test group arms of the study which sought to compare a single round of cervical cancer screening with HPV testing, cytology, and visual inspection with acetic acid (VIA) among over 131,746 "healthy women between the ages of 30 and 59 years" in rural India. In fact, the study acknowledged that the positive predictive value (PPV) for detecting CIN 2–3

was 19.3% in the cytologic testing group, higher than 11.3% in the HPV testing group, and study results indicate that essentially the same numbers of cervical cancers were detected after positive screening test results in the cytology arm (88) as in the HPV arm (87). Cervical cancer detection rates were 0.344% in the cytologic testing group and 0.321% in the HPV testing group [Table 1]. Among cervical cancers detected after a positive screening test, more cervical cancers were detected in the earliest and most favorable Stage (IA) in the cytology arm (58/88, 65.9%) than in the HPV arm (45/87, 51.7%), and there were fewer advanced (Stage II+) screening-detected cervical cancers in the cytology arm (10/88, 11.4%) than in the HPV arm (14/87, 16.1%) [Table 1]. The preliminary 2005 publication of study data had earlier reported that cytology had a higher detection rate for CIN 2-3 (1.0%) than for HPV testing (0.7%) and observed the following: "Our present findings indicate that the detection rates of HPV testing did not show any improvement over cytology. Furthermore, the currently available test (HC2) is expensive and requires a relatively sophisticated laboratory operation."[3] Only the individuals performing HPV testing are specifically described in the 2005 report as having been trained "intensively." What new information then led to the quite different study conclusions reported in the 2009 publication and the simultaneous manufacturer's press release?

The 2009 publication employed the well-recognized "intention-to-treat-principle" in which all eligible patients assigned to a study arm are included in the final "Assessments of numerous internal biases suggest that the widely reported conclusions may be significantly misleading."

> Austin RM, Zhao C. Cytojournal, 2009



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"We certainly do not claim to have evidence that study irregularities were due to deliberate data manipulation. Readers, of course, will make their own personal judgements about study inconsistencies."

> Austin RM, Zhao C. Cytojournal, 2009

The Osmanabad RCT is not subject to oversight by the US Office for Human Research Protections, the US Office of Research Integrity, or the US Freedom of Information Act.

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HPV Screening for Cervical Cancer in Rural India

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ABSTRACT

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METHODS

In this cluster-randomized trial, 52 clusters of villages, with a total of 131,746 healthy women between the ages of 30 and 59 years, were randomly assigned to four groups of 13 clusters each. The groups were randomly assigned to undergo screening by HPV testing (34,126 women), cytologic testing (32,058), or VIA (34,074) or to receive standard care (31,488, control group). Women who had positive results on screening underwent colposcopy and directed biopsies, and those with cervical precancerous lesions or cancer received appropriate treatment.

RESULTS

In the HPV-testing group, cervical cancer was diagnosed in 127 subjects (of whom 39 had stage II or higher), as compared with 118 subjects (of whom 82 had advanced disease) in the control group (hazard ratio for the detection of advanced cancer in the UNI testing group 0.47 of 0.69 are fidence integral (GU 0.22 to 0.69. There are a start of the detection of advanced cancer in the UNI testing group 0.47 of 0.69 are fidence integral (GU 0.22 to 0.69. There are a start of the detection of advanced cancer in the UNI testing group (hazard ratio for the detection of advanced cancer in the UNI testing group 0.47 of 0.69 are fidence integral (GU 0.22 to 0.69. There are a start of the detection of advanced cancer in the detection of advanced cancer

From the International Agency for Research on Cancer, Lyon, France (R.S., R.M.): and the Nargis Dutt Memorial Cancer Hospital, Tata Memorial Centre Rural Cancer Project, Barshi (B.M.N., K.J., A.M.B., S.H., S.G.M., R.T., A.K., V.R.K., R.R., N.P.), and the Tata Memorial Centre, Mumbai (S.S.S., R.C., R.K., S.K., S.D., K.A.D.) — both in India. Address reprint requests to Dr. Sankaranarayanan at the International Agency for Research on Cancer, 150 cours Albert Thomas, Lyon 69008, France, or at sankar@iarc.fr.

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| Study location | Year started/ ended | Agent | Funder | Intervention | Design failures | Execution failures |
|-------------------|---------------------------|-------|-----------|--------------------------|---|--|
| Mumbai | 1997/ 2015 | TMH | US NCI | Down- staging None | Deliberately allowed human beings to | Studied an obsolete intervention [?Data falsification] |
| | | | | VIA | die merely | Effects resulted |
| Osmanabad | 1999/ | WHO/ | Gates | HC2® HPV | contemplate questions | from causes that did not |
| | 2007 | IARC | | Pap smears | that had | exist [?Data |
| | | | | None | been | falsification] |
| Tamil Nadu | 2000/ | WHO/ | Gates | VIA | answered | Irreproducible |
| | 2006 | IARC | Outob | None | | results |

| US-Funded randomized controlled trials of cervical screening in India: Summary of irreproducible results | | | | | |
|---|---------------------------|--|--|--|--|
| Study location | Principle investigator | Irreproducible results | | | |
| Tamil Nadu | Sankaranarayanan | VIA reduced both incidence and death rates of cervical cancer | | | |
| Osmanabad | Sankaranarayanan | VIA reduced neither incidence nor death rates of cervical cancer | | | |

"The discrepancy between the authors' earlier findings and the current findings with regard to the benefits of VIA calls for more explanation." *Ankit J et al. NEJM, July 2009*

"The reasons for the discrepancies are not entirely clear to us." Sankaranarayanan R. NEJM, July 2009

| Study location | Year started/ ended | Agent | Funder | Intervention | Design failures | Execution failures |
|-------------------|---------------------------|-------|-----------|------------------|---|--|
| Mumbai | 1997/ 2015 | TMH | US NCI | Down- staging | Deliberately allowed human | Studied an obsolete intervention |
| | | | | None | beings to | falsification] |
| | | | | VIA | die merely | Effects resulted |
| Osmanabad | 1999/ WHO/ 2007 IARC | WHO/ | Gates | HC2® HPV | contemplate questions that had already | from causes that did not exist [?Data |
| | | IARC | | Pap smears | | |
| | | | | None | been | falsification |
| Tomil Nodu | 2000/ | WHO/ | Gatac | VIA | answered | Irreproducible |
| Faiiiii Nauu | 2006 | IARC | Uales | None | | results |

The most important lesson learned in Vietnam:

"Cervical cancer prevention efforts are more effective when leaders embrace an ideological commitment to the appropriate public health goal of *'improving health outcomes as* rapidly as possible among as many people as possible' and assimilate the policy implications of that commitment."

Suba EJ, Raab SS. Diagn Cytopathol. 2012

GEOGRAPHIC CYTOPATHOLOGY Section Editor: Mathilde Boon, M.D.

Lessons Learned From Successful Papanicolaou Cytology Cervical Cancer Prevention in the Socialist Republic of Vietnam

Eric J. Suba, M.D.1* and Stephen S. Raab, M.D.2

In 1996, we documented that the burden of cervical cancer in Vietnam was associated with troop movements during the Vietnam War. Subsequently, establishment of Papanicolaou screening in southern Vietnam was associated with reductions in cervical cancer incidence from 29.2/100,000 in 1998 to 16/ 100,000 in 2003. This is one of the first English-language reports of a real-world cervical cancer prevention effort associated with a decisive impact on health outcomes in a contemporary developing country. Lessons learned: if our ideological commitment is to improve health outcomes as rapidly as possible among as many people as possible, then Papanicolaou screening (with or without HPV or visual screening) must be implemented without further delay in any setting where cervical screening is appropriate but unavailable; consideration must be given to HPV vaccination after, rather than before, full coverage of target demographic groups by screening services has been achieved and/or the possibility has been excluded that HPV vaccination may be ineffective for cancer prevention. Competing ideological commitments engender

impradent yet commercially useful alternative strategies prome to decelerate global reductions in mortality by suppressing the more-rapid uptake of less-expensive open-source technology in favor of the less-rapid uptake of more-expensive proprietary technologies with uncertain real-world advantages and unfavorable real-world operational limitations. Global cervical cancer prevention efforts will become more effective if global health leaders, including the Bill & Melinda Gates Foundation, embrace an ideological commitment to improving health outcomes as rapidly as possible among as many people as possible and assimilate the policy implications of that commitment. Diagn. Cytopathol. 2011;00:000-000, o 2011 Wiley-Liss, Inc.

Key Words: Papanicolaou cytology screening; cervical cancer prevention; developing countries; HPV vaccines; Bill & Melinda Gates Foundation

Before Papanicolaou cytology cervical cancer prevention services became widely available in the United States, cervical cancer was a leading cause of death among American women, with an incidence rate in 1947 of 44/ 100,000.1 Cervical cancer remains a leading cause of death in many developing countries because of a lack of population coverage by cervical screening services in these settings. American volunteers interested in cervical cancer prevention first visited Vietnam in January 1994,2 and were promptly presented with population-based tumor registry data documenting cervical cancer incidence rates five times higher in southern Vietnam3 relative to northern Vietnam.4 A 1996 case-control study sponsored by Stanford University documented that these regional variations in cervical cancer incidence rates were associated with prior troop movements during the Vietnam War.5

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DECADENCE: Tata Memorial Hospital, WHO/IARC, US NCI, and Gates Foundation deliberately allowed human beings to die merely to contemplate questions that had already been answered.

Delphi Exercise

REMEDY: Tata Memorial Hospital, WHO/IARC, US NCI, and Gates Foundation should embrace the Golden Rule of "improving health outcomes as rapidly as possible among as many people as possible," and assimilate the policy implications of the Golden Rule.

Delphi Exercise

- tool for structuring conversation
- enables diverse individuals to deal with complex problems
- requires structured information flow and anonymous interaction
- reduces untoward consequences of face-to-face interactions (groupthink, bandwagon effect, halo effect, etc)



Log out

Authorization:

Delphi Exercise: Cervical Cancer Prevention: round 1

Question 8 | Question 9 | Question 10 | Question 11

?help

 Administrator log in

Expert log in

Related useful links and texts:

- Forecasting website
- >>> What's New
 <<

Question:

* indicates required field.

Select answered question:

Việc đưa kỹ thuật VIA, vac-xin phòng ngừa HPV và/hoặc khám sàng lọc HPV có loại bỏ hoàn toàn những đòi hỏi về tế bào học phụ khoa không?

Question 1 | Question 2 | Question 3 | Question 4 | Question 5 | Question 6 | Question 7 |

¿La introducción de la inspección visual con ácido acético (IVA), las vacunas de virus de papiluma humano (VPH) o el tamizaje con VPH eliminan la necesidad de la citología cervical?

Will the introduction of visual inspection with acetic acid (VIA), human papillomavirus (HPV) vaccines, and/or HPV screening entirely eliminate requirements for gynecologic cytology?

(Text Only)

Please provide the textual response to the questions above:

No. HPV vaccines will not eliminate requirements for screening. Cytology will be required for primary screening of younger women in HPV-based screening programs, for primary screening of postmenopausal women in VIA-based screening programs, and for confirmatory testing of screen-positive women in both HPV- and VIA-based screening programs. Because individuals with positive screening tests for cancer desire to know whether they truly have the disease, HPV and VIA "screen and treat" programs that do not provide confirmatory testing will require incomplete informed consent, which sooner or later will become problematic.

Submit answer

Click to submit your answer and move on to the next question.

Delphi Decision Aid | © 2003, J. Scott Armstrong | last updated: 2/17/2005 Contact webmaster with questions and problems



Data results: Question #1

Question: Việc đưa kỹ thuật VIA, vac-xin phòng ngừa HPV và/hoặc khám sàng lọc HPV có loại bỏ hoàn toàn những đòi hỏi về tế bào học phụ khoa không? ¿La introducción de la inspección visual con ácido acético (IVA), las vacunas de virus de papiluma humano (VPH) o el tamizaje con VPH eliminan la necesidad de la citología cervical? Will the introduction of visual inspection with acetic acid (VIA), human papillomavirus (HPV) vaccines, and/or HPV screening entirely eliminate requirements for gynecologic cytology?

Responses for this question

Expert's answer:

Considero que NO, pues todas las medidas deben de llevarse integralmente unificando los esfuerzos para la prevención del Cáncer de Cérvix. Además cada uno se aplica a diferentes grupos etarios y depende de la situación geográfica de las personas por lo que no pueden desplazarse unos a otros.

Expert's answer:

La visualización con ácido acético (IVA) es un método que detecta lesiones del epitelio cervical, pero no discrimina entre metaplasia escamosa inmadura, lesiones inflamatorias y regeneración. Aunque se menciona que las lesiones de neoplasia intraepitelial(CIN) son blancas, opacas y bien delimitadas a la inspección, se requiere experiencia para una buena visualización del cuello. Esta prueba al parecer tiene un costo bajo y tal vez esa sea una ventaja ya que se puede emplear en zonas desprotegidas. Las vacunas contra VPH dan protección contra los tipos 16 y 18 del virus, pero hay otras variantes que también se han asociado al cáncer del cuello uterino y el efecto a largo plazo de estas vacunas no es evidente todavía por el tiempo que tienen de uso. El tamizaje para VPH es sin duda de gran utilidad, pero una prueba positiva para VPH no necesariamente implica que la mujer tenga una lesión de alto grado o neoplásica. Considero que las tres estrategias arriba mencionadas no eliminan del todo la necesidad de la citología cervical.

Expert's answer:

Việc đưa kỹ thuật VIA, vac-xin phòng ngừa HPV, khám sàng lọc HPV chỉ là biện pháp bổ xung, KHÔNG THỂ loại bỏ hay thay thế tế bào học phụ khoa, không chỉ ở Việt Nam mà trên phạm vi toàn cầu. Kỹ thuật VIA chỉ có ý nghĩa gợi ý và/hoặc giúp thêm cho định vị sinh thiết. Nếu trong trường hợp đã áp dụng VIA, thì việc kết hợp làm tế bào học phụ khoa càng thuận lợi, như người ta thường nói là

Eleven questions regarding cervical cancer prevention in India

During the 1970s and 1980s, numerous scientific studies established cervical screening to be an archetypal preventive health intervention.[9] Nevertheless, since 1998, three separate randomized trials in India funded by the US National Cancer Institute (NCI) and the Bill and Melinda Gates Foundation have compared, in aggregate, cervical cancer death rates among 224,929 women offered cervical screening to cervical cancer death rates among 138,624 women offered no screening whatsoever. To date, at least 254 women in unscreened control groups have died from cervical cancer.^[2-4]

The US Office for Human Research Protections (OHRP) provides leadership in the protection of human subjects involved in research conducted or supported by the US Department of Health and Human Services. The OHRP has no authority to investigate research funded by the Gates Foundation, but determined in 2012 that the NCI-funded study in India was unethical because study subjects had not been given adequate information to provide informed consent.^{FI} The lack of equipoise embedded in the defective scientific design of these US-funded studies required inadequate informed consent, and, predictably, nothing was learned from the deaths of women in these studies that was not already known.[3]

Conversations regarding the science and ethics of the iconic Tuskegee Syphilis Study, to which the US-funded India screening studies have been compared,¹⁴ have continued for decades following the halt of that tragic debacle in 1972. The injustice of the US-funded India screening studies will be compounded if past^[14] and future conversations regarding those studies needlessly redirect intellectual resources required to address India's current challenges into contemplations of an immutable past.

Real-world obstacles to successful cervical cancer prevention involve people far more than technology, and success requires sustained, coordinated effort among stakeholders with shared interests but competing incentives.^[6] For example, although

all stakeholders share an interest in improving Eric J. Suba health outcomes by preventing cervical cancer, some stakeholders aim to improve outcomes while enhancing corporate profit, while others aim to improve outcomes while enhancing research funding and academic advancement, and still others aim to improve outcomes while enhancing professional reimbursement.¹⁹

The definitive goal of all public health efforts. including cervical cancer prevention, is to improve health outcomes as rapidly as possible among as many people as possible. However, as exemplified by the tragic US-funded India screening studies, influential global health organizations are currently incentivising research and commercial interests at the expense of that definitive goal.^[2] The time is past due for a shift in conversational agendas. away from those which primarily benefit research and commercial interests, toward those which primarily benefit the common good. Productive conversations regarding the most effective routes toward the definitive goal of public health should be encouraged.

THE DELPHI METHOD: A CONVERSATIONAL TOOL

The Delphi method is a tool for structuring conversation in manners that allow diverse (and at times contentious) groups of individuals to deal with complex problems without necessarily having to meet face-to-face.¹⁷ The Delphi method was originally developed at the RAND Corporation during the Cold War to forecast the impact of technology on warfare, and is characterized by anonymity of participants and structured information flow. These characteristics help avoid certain negative attributes of face-to-face conversation (such as groupthink, bandwagon effect, halo effect, and personality conflict) that tend to cause poor decision-making. The Delphi method allows participants to more freely express their opinions, openly critique the opinions of others, admit error, and revise judgments, With the Delphi method, participants maintain anonymity, sometimes even after final reports are issued

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> Access this article online Website: www.canceriournel.net DOI: 10.4103/0973-1482.142740



<u>Delphi Questions: A Socratic method for assimilating the</u> <u>policy implications of the Golden Rule</u>

Will the introduction of VIA, and/or HPV vaccines, and/or HPV screening entirely eliminate requirements for Pap smears?

Will the introduction of HPV screening accelerate or decelerate reductions in cervical cancer rates?

Will the introduction of VIA screening accelerate or decelerate reductions in cervical cancer rates?

Will the introduction of HPV vaccines accelerate or decelerate reductions in cervical cancer rates?

<u>Proposal: A Delphi Exercise for Cervical</u> <u>Cancer Prevention in India</u>

- recruit cervical cancer prevention stakeholders (MOH, CEHAT, MASUM, KEM, TMH, WHO/IARC, US NCI, etc)
- obtain email addresses of 6-12 stakeholders
- conduct Delphi Exercise online
- meet face to face to discuss results