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</table>
ADULT HEALTH PROGRAM
HEALTH TECHNOLOGY PROGRAM

EFFECTIVENESS OF CERVICAL 
CANCER SCREENING PROGRAMS

ANNOTATED BIBLIOGRAPHY

HELENA ESPINOSA RSTREPO
GLORIA A. COE
JORGE PENA MOHR
JORGE LITVAK

Washington, D. C. May, 1986
TABLE OF CONTENTS

PROLOGUE WHITE SECTION 1
PREFACE WHITE SECTION 1
OVERVIEW WHITE SECTION 3
BIBLIOGRAPHY WHITE SECTION 8
REVIEW OF LITERATURE WHITE SECTION 9
USE OF THE ANNOTATED BIBLIOGRAPHY WHITE SECTION 10
DIRECTIONS FOR USE WHITE SECTION 12
ABSTRACTS OF DOCUMENTS GREEN SECTION 1 - 45
LIST OF AUTHORS PINK SECTION 1 - 8
LIST OF SUBJECTS YELLOW SECTION 1 - 2
GEOGRAPHIC LOCATION BLUE SECTION 1 - 2
ANNEX Series of Publications on Health Technology Development
The Health Technology Development Program and the Adult Health Program, in collaboration with the Documentation and Health Information Center of the Pan American Health Organization (PAHO), prepared this fifth Health Technology Clearinghouse on issues related to technology development.

This volume presents a review of 100 articles on the effectiveness of cervical cancer screening programs. The extensive literature published from 1966-1985 was critically reviewed and articles selected that define the state-of-the-art. The abstract of each article, indexes by author, by subject matter, and by geographic location are presented. In addition, the complete document is available on microfiche.

Dr. Restrepo, Regional Advisor in Chronic Diseases of the Adult Health Program, reviewed and selected the 100 articles on cervical cancer. Mrs. L. Hoffenberg, of the Latin American Cancer Research Information Project (LACRIP) of the Adult Health Program, performed online searches of CANCERLINE and MEDLINE databases to identify the basic documents from which this annotated bibliography was prepared. Ms. Jane Dembner, Research Consultant and staff member of Policy Research, Inc., completed a systematic literature search, reviewed the articles selected, and wrote a modified abstract on information relevant to the topic. Her technical expertise is gratefully acknowledged.

Mrs. Rojo, staff member of the Center of Information and Documentation, classified, indexed, prepared content summaries, and developed the thesaurus. She and Ms. Rodriguez, staff member of the Health Technology Development Program, incorporated the information into the computerized data base.

Dr. Carlos Gamboa, Chief of Documentation and Health Information Center, oriented and enthusiastically supported this effort during the different phases of development.

We invite our readers to make suggestions and to contribute material to future publications of Health Technology Clearinghouse.
In the future, the Health Technology Development Program will publish similar clearinghouse reports. The selection of each topic will be made in consultation with Member Governments, PAHO Technical Units and Programs, and in coordination with similar initiatives of the European Office of the World Health Organization.

March 1986
Washington, D. C.

Helena Espinosa Restrepo
Regional Advisor in
Chronic Diseases
Adult Health Program

Gloria A. Coe
Technical Officer in
Health Technology

Jorge Litvak
Coordinator
Adult Health Program

Jorge Peña Mohr
Regional Advisor in
Health Technology
A. Search Methodology

This bibliography is the result of a thorough and systematic search of published material in English on cervical neoplasms and the effectiveness of mass screening.

On-line searches of Medline and Cancerlit databases for the 1966-April 1985 resulted in 1,000 published documents. Documents were divided into the following three categories based on the relationship between the document and topic.

1. Clearly relevant
2. Possibly relevant
3. Clearly irrelevant

Relevance was determined by careful review of the title, keywords, and abstract. The criteria for defining relevance of each category were:

1. Clearly relevant:
   - Assessment of cervical cancer screening programs.
   - Assessment of the Papanicolaou (PAP) smear.
   - Cost-effective analysis of cervical cancer screenings.

2. Possibly relevant:
   - Etiology of cervical cancer.

3. Clearly irrelevant:
   - Treatment of cervical cancer.
   - Risk factors of cervical cancer.
   - Documents published before 1966.
   - Documents in languages other than English.

Approximately 300 documents were identified as clearly relevant to the project. Based on a critical review of the documents, their citation in scientific journals, and their relevance to the topics selected, the total was reduced to 100 articles.
The search methodology briefly outlined above was adapted from a protocol developed by Policy Research, Inc. to improve the efficiency and effectiveness of literature searches. The same technique was used as part of the Medical Practice Information Demonstration Project conducted by the Office of the Assistant Secretary of Health, U.S. Department of Health, Education, and Welfare.

One hundred documents were selected for inclusion in this authoritative bibliography on the effectiveness of cervical cancer screening programs and procedures. Abstracts presented in alphabetical order by author contain current research trends and methods, assessment of cervical cancer screening programs, assessment of the PAP smear, and/or cost-effective analysis of cervical cancer screening.
OVERVIEW

Cancer of the uterine cervix is a problem of important magnitude in Latin America and the Caribbean. Data on mortality show high rates in most of the countries (Table 1).

<table>
<thead>
<tr>
<th>Country **</th>
<th>Mortal. year</th>
<th>Crude</th>
<th>Adjusted by age***</th>
<th>Truncated (35-64 yrs.)</th>
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<td>11.4</td>
<td>14.7</td>
<td>29.5</td>
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<td>11.5</td>
<td>20.3</td>
</tr>
<tr>
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<td>1988</td>
<td>7.8</td>
<td>11.5</td>
<td>20.3</td>
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<tr>
<td>Bahamas</td>
<td>1988</td>
<td>11.9</td>
<td>13.6</td>
<td>27.7</td>
</tr>
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<td>Belize</td>
<td>1982</td>
<td>11.3</td>
<td>12.3</td>
<td>30.3</td>
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<tr>
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<td>1982</td>
<td>7.6</td>
<td>12.1</td>
<td>26.3</td>
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<td>11.7</td>
<td>25.2</td>
</tr>
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<td>1990</td>
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<td>11.1</td>
<td>20.0</td>
</tr>
<tr>
<td>Cuba</td>
<td>1987</td>
<td>6.0</td>
<td>10.8</td>
<td>21.3</td>
</tr>
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<td>Dominican Republic</td>
<td>1987</td>
<td>6.1</td>
<td>10.5</td>
<td>21.6</td>
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<tr>
<td>Ecuador</td>
<td>1982</td>
<td>7.1</td>
<td>10.4</td>
<td>18.2</td>
</tr>
<tr>
<td>El Salvador</td>
<td>1981</td>
<td>4.2</td>
<td>5.6</td>
<td>...</td>
</tr>
<tr>
<td>Guatemala</td>
<td>1981</td>
<td>2.8</td>
<td>4.7</td>
<td>10.0</td>
</tr>
<tr>
<td>Haiti</td>
<td>1979</td>
<td>5.0</td>
<td>6.5</td>
<td>9.7</td>
</tr>
<tr>
<td>Honduras</td>
<td>1982</td>
<td>2.2</td>
<td>4.0</td>
<td>8.1</td>
</tr>
<tr>
<td>Jamaica</td>
<td>1978</td>
<td>5.7</td>
<td>6.6</td>
<td>13.2</td>
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<td>Mexico</td>
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<td>3.8</td>
<td>6.3</td>
<td>12.3</td>
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<td>3.2</td>
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<tr>
<td>St. Kitts-Nevis, St. Lucia, St. Vincent, Trindad &amp; Tobago</td>
<td>1980</td>
<td>6.3</td>
<td>6.5</td>
<td>6.6</td>
</tr>
</tbody>
</table>

* per 100,000 women.

** No information is available for Bermuda, Cayman Islands, Falkland Islands, French Guiana, Nicaragua, St. Pierre and Miquelon, Virgin Islands, Bolivia, and Haiti. It is thought that the data for Central America, with the exception of Costa Rica and Panamã could possibly reflect a high level of underregistration.

*** Adjusted to the world population.

... No information available.
The data from some countries, owing to underregistration, do not reflect the true magnitude of the problem. For example, in some countries of Central and South America, although low rates of mortality are reported, cytological and pathological diagnosis indicate that cancer of the uterine cervix is much greater. Data obtained from Member Governments indicate that approximately 15% of all cancer deaths in women of the Americas is due to cervical cancer, in some countries the figure is as high as 25%.

Data on the incidence of cancer, taken from population registers in some countries and cities in Latin America and the Caribbean, such as those of Cali, Colombia; Sao Paulo, Brazil; Kingston, Jamaica; Puerto Rico; Cuba (2); Panamá (3); Lima, Perú (4); La Paz, Bolivia (5) and Fortaleza, Brazil (6) have contributed to documenting the high incidence rates of cancer of the cervix in these populations.

Using this data on incidence, an approximation to cumulative risk was calculated (7), expressed as a cumulative rate per 100 women; this represents the risk of developing cancer of the uterine cervix from birth to 74 years. The data used to calculate cumulative risk has a high confidence level since it is obtained from population based cancer registries.

A comparison of cumulative risks for different population groups is presented in Figure 1. It is significant that of the first ten population groups, half are from Latin America and the Caribbean. Although not indicated in Figure 1, Rosero and Grimaldo (8) report that Costa Rica, based on a population-based cancer registry, has a cumulative risk of 5.1%.

Known indicators of high risk such as socioeconomic poverty and deficient health services coverage, and some identified risk factors, such as early initiation of sexual activity and promiscuous male and female sexual behaviors are common factors in many areas in developing countries. Male sexual behavior seems to be one of the most important risk factors and is now being studied in some areas of Latin America.

The situation of control programs for cervical cancer in most of the countries is serious because a significant proportion of women do not undergo a cytological examination during their sexual lives, which increases their risk around 10 times as has been reported by several authors (9). Many areas of Latin America and the Caribbean show similar conditions. The coverage of screening programs in developing countries is apparently extremely low, less than 10% during 35 to 64 years when the higher incidence and mortality of invasive cervical cancer is shown.
FIGURE 1
APPROXIMATION TO CUMULATIVE RISK FOR INVASIVE CANCER OF THE CERVIX UTERI, 0-74 YEARS OF AGE*

<table>
<thead>
<tr>
<th>Country</th>
<th>Cumulative Risk in Percent</th>
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<tbody>
<tr>
<td>BOLIVIA (LA PAZ)</td>
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</tr>
<tr>
<td>BRAZIL (RECIFE)</td>
<td>6.1</td>
</tr>
<tr>
<td>COLOMBIA (CALI)</td>
<td>5.5</td>
</tr>
<tr>
<td>BRAZIL (FORTALEZA)</td>
<td>5.1</td>
</tr>
<tr>
<td>BRAZIL (SAO PAULO)</td>
<td>3.9</td>
</tr>
<tr>
<td>HONG KONG</td>
<td>3.3</td>
</tr>
<tr>
<td>RUMANIA</td>
<td>3.3</td>
</tr>
<tr>
<td>NEW ZEALAND</td>
<td>3.3</td>
</tr>
<tr>
<td>INDIA (POONA)</td>
<td>3.2</td>
</tr>
<tr>
<td>SINGAPORE (Hindus)</td>
<td>3.2</td>
</tr>
<tr>
<td>JAMAICA</td>
<td>3.1</td>
</tr>
<tr>
<td>NETHERLAND ANTILLES</td>
<td>3.0</td>
</tr>
<tr>
<td>DEM. REP. OF GERMANY</td>
<td>3.0</td>
</tr>
<tr>
<td>CUBA</td>
<td>2.0</td>
</tr>
<tr>
<td>PUERTO RICO</td>
<td>2.0</td>
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<tr>
<td>CANADA (BRITISH COL)</td>
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<tr>
<td>USA (CONNECTICUT)</td>
<td>0.8</td>
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<tr>
<td>ISRAEL</td>
<td>0.5</td>
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</tbody>
</table>

*See reference 7 For an explanation and calculation of cumulated risk.
Since the use of technologies for the detection, diagnosis and treatment of the preinvasive forms of cancer of the uterine cervix prevents the invasive forms of the disease, a large part of the difference in current mortality rates among countries is attributed to significant differences in the use of these technologies. The experiences of the countries or populations (Scandinavia, Canada, Iceland) where adequate control activities have been organized for early detection of curable forms of cervical cancer show that mortality has been reduced significantly. For countries having deficient programs, it is hoped that 60% or more of deaths will be avoided if effective screening programs are organized.

The proportional attributable excess* of deaths from cancer of the cervix in different countries is estimated by taking the rate of Canada in 1981, adjusted to the world population of 3.2 per 100,000 women, as a basis for comparison (Table 2). This percentage of observed mortality is that which it is hoped will be reduced with the application of adequate control activities. For countries having deficient programs, it is envisioned that a large proportion of deaths, 60% or more, will be avoided. In other countries, considerable reductions are also expected, either because the programs have not yet had enough time for an impact to be produced, or because the programs need further improvements. This is the case of Cuba, where the accessibility and health services coverage is good but more screening in women 55 years and older is needed. As can be seen from Table 2, almost all the countries of Latin America and the Caribbean could reduce deaths from this kind of cancer by more than 40%.

There is a need for a wider use of the PAP smear in many countries of the world. In Latin America and the Caribbean, where the mortality of cervical cancer is so high, major efforts must be developed to organize screening programs to reach women during the ages of high risk. Every woman in high risk countries that has or had sexual activity between the ages of 30 to 60 years must be screened properly using the Papanicolaou technique.

* The proportional attributable excess was calculated using the following formula:

\[
AE = \frac{DRC^- - DRC}{DRC^-} \times 100
\]

AE = Attributable Excess
DRC = Death rate in country with program
DRC^- = Death rate in country without program
TABLE 2

Percentage of deaths per year due to cancer of the uterine cervix that could be avoided with proper control activities*

<table>
<thead>
<tr>
<th></th>
<th>Under 20%</th>
<th>Between 21% and 40%</th>
<th>Between 41% and 60%</th>
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<td>Cuba</td>
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<td>Colombia</td>
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<td>Chile</td>
<td></td>
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<td>Perú</td>
<td>Costa Rica</td>
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<td></td>
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<td>Uruguay</td>
<td>México</td>
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<tr>
<td></td>
<td></td>
<td>Argentina</td>
<td>Panamá</td>
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<td></td>
<td>Venezuela</td>
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<td></td>
<td></td>
<td></td>
<td>English-speaking</td>
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<td></td>
<td></td>
<td></td>
<td>Caribbean</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>(11 countries)</td>
<td></td>
</tr>
</tbody>
</table>

* Calculations are based on the adjusted rates of the countries around 1980. For countries not included in the table, information was not available or the information was thought to show a high level of underregistration. The pattern of comparison used was the rate of mortality in 1981 in Canada.

Women must be encouraged to participate in cervical cancer screening efforts. Of the women screened, efforts must be made to insure the quality of the smears taken, the meticulousness of the laboratories in which the samples are examined, and the uniformity of the diagnosis criteria for the smears. Follow-up of suspicious and positive smears is necessary to insure that as many women as possible who have atypia of the cervix will be identified, monitored, and treated.

Health education and prevention to control cervical cancer should be increased among women and men. Unfortunately, primary prevention measures are still not part of medical knowledge. The role of the papilloma virus in the etiology of cervical cancer is a promising area for future research. For the present prevention and control programs must continue to be based on the use of vaginal cytology test as a screening test and proper and early diagnosis and treatment of precursor lesions. In other words, secondary prevention is the most encouraging strategy to select. This goal is one to work towards in an all-out effort to end unnecessary deaths from cervical cancer and to improve the quality of life for all women.
Bibliography

1. Obtained from the Department of Statistics, PAHO; reported by Member governments.


REVIEW OF THE LITERATURE

Review articles (Miller AB, 1985; Murphy, 1980) and statements of policy (International Academy of Cytology, 1980; National Institute of Health, 1980) are perhaps the best place to begin an investigation of this topic. The great volume of literature is consolidated and reviewed with the aim of finding the best methods and applications for mass screening for cervical cancer. The debate on the optimum screening frequency for the Papanicolaou (PAP) smear (American Cancer Society, 1980; Day, 1984; Gunby, 1980; Knox, 1976; The Walton Report, 1976; Yu, et al., 1982) is best examined in this way. These overviews can be most helpful when examining the long-term studies on the effect cervical cancer screening has had on mortality and morbidity.

The PAP smear is a valuable test for the detection of cervical cancer and its precursors. It is utilized to a great extent in the United States (Breslow, 1977; Christopherson, 1976); Canada (Boyce, 1981 and 1982; Miller, 1976; National Health & Welfare, 1976 and 1982); Sweden (Helm, 1980); Norway (Pedersen, 1971); and Great Britain (MacGregor, 1978).

The cost of medical procedures and health promotion and disease prevention efforts vary widely from program to program, place to place, and country to country. It is, therefore, very difficult to take the data from one program and apply it directly to others. However, work has been done using modeling techniques (Knox, 1973 and 1976) that allows examination of different variables and conditions and thus facilitates the identification of efficient and cost-effective methods for screening of cervical cancer.

The effectiveness of the PAP smear in mass screening has been examined in many clinical and experimental studies. Together these studies provide the evidence on the effectiveness of mass screening efforts for cervical cancer. Based on this evidence, there is general agreement that early detection of cervical cancer with the PAP smear reduces mortality of the disease. Some of the most encouraging results were achieved in Canada (Boyce, et al., 1981; The Walton Report, 1976), Kentucky (Christopherson, et al., 1976), and Sweden (Stenkvist, et al., 1984).

The body of work on the frequency of PAP testing is perhaps the most difficult to interpret. The long-standing recommendation of annual testing has recently come into question as less frequent screening is examined as an effective alternative. However, it is widely believed that efforts must be exerted to reach those women at highest risk of cervical cancer which are unfortunately those women who are least likely to become involved in a mass screening program. Although frequency of testing is important, the most important point on which to focus is that all women, especially women between 35 and 64 years of age, have access to cervical cancer screening (Miller, 1984).
USE OF THE ANNOTATED BIBLIOGRAPHY

Documents are organized and presented by accession number in the Data Bank of the PAHO LINE System. This number starting with No. 50592 is sequentially assigned to each document as it is incorporated into the ANNOTATED BIBLIOGRAPHY.

Each document is then microfilmed and its microfiche is labeled with the same corresponding accession number.

Each document contains the following information.

1. Accession Number.
2. Title of book, article, publication, magazine, etc.
3. Language.
4. Authors.
5. Subjects: each document may be classified under as many as 12 subjects.
6. Document: No. of microfilm and microfiche and/or where the document is filed. (This number identifies the microfiche number and where the document can be obtained either in our Central Office in Washington, D.C., or in any of our Country Offices).
7. Geographic location: indicates the geographic area referred to in the article.
8. Abstract: summary of the article.

The Annotated Bibliography is presented in four sections.

**Green Section:**
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List of Subjects:
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0050598 - CERVICAL INTRAEPITHELIAL NEOPLASIA IN BRITISH COLUMBIA: A COMPREHENSIVE PROGRAM FOR DETECTION, DIAGNOSIS, AND TREATMENT. PP. 11, REF. 11.


LANGUAGE: ENGLISH

AUTHORS: C1) BENEDET JL

SUBJECTS: C1) CERVIX NEOPLASMS: DIAGNOSIS

C2) CERVIX NEOPLASMS: OCCURRENCE

C3) CYTOLOGY

DOCUMENTS: C1) GYNECOL ONCOL

C2) CRT : 457:01-72

LOCATION: CANADA-BRITISH COLUMBIA


THE ADDITION OF A CENTRALLY DIRECTED COLPOSCOPY WILL RESULT IN EVEN GREATER BENEFITS FOR WOMEN OF THE PROVINCE. THE REAL VALUE OF THE COLPOSCOPY LIES IN ITS ABILITY TO IMPART GREATER FLEXIBILITY IN THE INVESTIGATION AND SUBSEQUENT MANAGEMENT OF PATIENTS WITH ABNORMAL CERVICAL CYTOLOGY. ALTERNATIVE THERAPEUTIC MODALITIES TO MANAGE INTRAEPITHELIAL LESIONS OTHER THAN CONE BIOPSY OR Hysterectomy ARE ESSENTIAL IN COMMUNITIES WHERE CYTOLOGY REPORTING IS NOT HIGHLY RELIABLE. COLPOSCOPY MAY STILL BE OF VALUE AS A DIAGNOSTIC METHOD, PROVIDED AN ADDITIONAL ASSESSMENT IS MADE OF PATIENTS WITH ABNORMAL SMEARS WHO MIGHT DEVELOP DIAGNOSTIC CONFUSION BUT NO SIGNIFICANT PATHOLOGY.
RESULTS OF SEVERAL CLINICAL AND EPIDEMIOLOGICAL STUDIES PROVIDE NEW INFORMATION ABOUT THE COSTS, RISKS, AND EFFECTIVENESS OF MANY TESTS USED FOR THE EARLY DETECTION OF CANCER. IN RESPONSE TO THIS NEW INFORMATION, THE AMERICAN CANCER SOCIETY HAS REEVALUATED ITS RECOMMENDATIONS CONCERNING CANCER-RELATED SUCH AS CHECK-UP TESTS, PROCEDURES, AND HEALTH COUNSELING FOR THE PREVENTION AND EARLY DETECTION OF CANCER. THIS PAPER SUMMARIZES THE NEW RECOMMENDATIONS. THE SOCIETY STRONGLY ENDORSES A GENERAL EFFORT TO PREVENT THE MORTALITY, MORTALITY, AND COST OF ALL DISEASES. THIS REPORT REINFORCES THE EFFORT BY DESCRIBING CANCER IN GENERAL HEALTH PROMOTION, FOR THE EARLY DETECTION OF CERVICAL CANCER IN ASYMPTOMATIC PERSONS. THE SOCIETY RECOMMENDS THAT: (1) WOMEN 20 AND OVER, AND THOSE UNDER 20 WHO ARE SEXUALLY ACTIVE HAVE A PAPANICOLAU TEST AT LEAST EVERY THREE YEARS; AFTER TWO INITIAL NEGATIVE TESTS A YEAR APART. (2) WOMEN 20 TO 40 HAVE A PELVIC EXAMINATION AS PART OF A GENERAL PHYSICAL EXAMINATION EVERY THREE YEARS. WOMEN OVER 40 HAVE A PELVIC EXAM EVERY YEAR. AT MENOPAUSE WOMEN HAVE A PELVIC EXAM AND A PAP TEST.

IN BEIGHTON, ENGLAND, THE MEAN AGE OF PATIENTS WITH HISTOLOGICALLY PROVEN CARCINOMA OF THE CERVIX DECREASED, FROM 50 IN 1967 TO 35 IN 1977. IN ONE YEAR ABNORMAL CELLS WERE FOUND IN CERVICAL SMEARS FROM 24 TEENAGE GIRLS (FIVE AGED 16, TWO AGED 17, EIGHT AGED 18, AND NINE AGED 19). IN FOUR OF THESE CASES, MALIGNANCY WAS SUBSEQUENTLY PROVEN HISTOLOGICALLY. UNTIL ETIOLOGY OF THE DISEASE IS ESTABLISHED, NO LOWER AGE LIMIT SHOULD BE SET FOR CERVICAL SCREENING. ALL YOUNG WOMEN OVER 15 YEARS SHOULD BE ENTITLED AND ENCOURAGED TO HAVE CERVICAL CYTOLOGY TESTS.

THE IMPACT OF VAGINAL CYTOLOGY ON CERVICAL CANCER RISKS IN CALI, COLOMBIA, PP. 5, REFs. 16.
CERVICAL CANCER

CONTINUED

SUBJECTS: 01) CERVIX NEOPLASMS
02) CYTOLOGY
03) NEOPLASM INVASIVENESS

DOCUMENTS: 01) INT J CANCER
02) CRT 457:31-35

LOCATION: COLOMBIA-CALI

THE ROLE OF VAGINAL CYTOLOGY SCREENING IN PREVENTING INVASIVE CARCINOMA OF THE CERVIX WAS INVESTIGATED IN CALI, COLOMBIA. THE HISTORY OF PREVIOUS PARTICIPATION IN SCREENING PROGRAMS WAS OBTAINED FROM 204 PATIENTS WITH INVASIVE CARCINOMA AND FROM 2 SETS OF AGE-MATCHED CONTROLS: ONE FROM THE SAME HEALTH CENTER AND ONE FROM THE SAME NEIGHBORHOOD OF THE PATIENT. THE RESEARCH RESULTS SHOWED THAT THE RISK OF DEVELOPING INVASIVE CARCINOMA IS AT LEAST 10 TIMES GREATER IN NON-SCREENED THAN IN SCREENED WOMEN.

PAPANICOLAU CERVICAL SMEARS FOR SCREENING IN ASYMPTOMATIC WOMEN. PP. 9, REFS. 30.

LANGUAGE: ENGLISH

AUTHOR: 01) BARNES B

SUBJECTS: 01) CARCINOGENIC RISK
02) CERVIX NEOPLASMS
03) CERVIX NEOPLASMS/MORTALITY
04) CYTOLOGY

DOCUMENTS: 01) PRIMARY CARE
02) CRT 457:36-44

LOCATION: US

THE ANNUAL PAPANICOLAU SMEAR AS A SCREENING TEST FOR CERVICAL CANCER IS EVALUATED ON THE BASIS OF COST-EFFECTIVENESS, PREDICTIVE VALUE, AND OTHER FACTORS OF PATIENT SELECTION AND COMPARATIVE TRENDS IN MORTALITY RATES BEFORE AND AFTER THE INTRODUCTION OF SCREENING PROGRAMS. FOR THE ASYMPTOMATIC WOMAN AT NORMAL RISK FOR CANCER, PAPANICOLAU SMEARS ARE RECOMMENDED ONLY ONCE EVERY FIVE YEARS, ALTHOUGH SYMPTOMATIC OR HIGH-RISK WOMEN SHOULD MAINTAIN AN ANNUAL SCREENING SCHEDULE.

SCREENING PROTOCOLS FOR CERVICAL NEOPLASTIC DISEASE. PP. 10, REFS. 12.

LANGUAGE: ENGLISH

AUTHORS: 01) BARRON BA
02) RICHART RM

SUBJECTS: 01) CERVIX NEOPLASMS/MORTALITY
02) CERVIX NEOPLASMS/OCURRENCE
03) CERVIX NEOPLASMS/STATISTICS
04) CYTOLOGY
05) NEOPLASM INVASIVENESS

DOCUMENTS: 01) GINECOL ONGOL
02) CRT 457:45-56

DETERMINATION OF AN OPTIMAL SCREENING STRATEGY FOR CERVICAL NEOPLASTIC DISEASE, REGARDLESS OF THE UNDERLYING MODEL, IS BASED ON A VARIETY OF ASSUMPTIONS AND THE NATURE OF THE DISEASE AND OF THE SCREENING PROCESS. THE CHARACTERISTICS OF ANY STRATEGY ARE DEPENDENT ON AND SENSITIVE TO THESE ASSUMPTIONS. THE ESTIMATION OF THE EFFECTS OF INITIATING A GIVEN SCREENING PROTOCOL IN A DEFINED POPULATION MUST INCLUDE A CONSIDERATION OF THOSE INDICES THAT ARE APPROPRIATELY DESCRIBED AS STATISTICALLY CRITI
CALL THE STRATEGIES RECOMMENDED BY THE AMERICAN CANCER SOCIETY (1980) AND THE WALTON COMMISSION (1976) WITH THEIR CHANGES IN REGIMENS FOR SCREENING ARE RELATIVELY INSENSITIVE IN THAT THEIR EFFECTS, USING AN INDEX OF SURVIVAL, WILL BE DIFFICULT TO ASCERTAIN STATISTICALLY. THE UTILITY OF ANY RECOMMENDED PROTOCOL IS, IN PART, A FUNCTION OF THE PROBABILITY OF HER DEVELOPING THE DISEASE. A DISCUSSION OF THE CHARACTERISTIC INDICES OF USE IN EVALUATING THE POTENTIAL EFFECTS OF SCREENING PROTOCOLS IS PRESENTED.


LANGUAGE: ENGLISH
AUTHORS: 01) BEILBY JW 02) BOURNE R 03) GUILLERBAUD J 04) STEELE ST
SUBJECTS: 01) CERVIX NEOPLASMS 02) CYTOLOGICAL TECHNICS 03) CYTOLOGY
DOCUMENTS: 01) OBSTET GYNECOL 02) CRT 457:57-60
LOCATION: UNITED KINGDOM

CERVICAL SMEARS TAKEN WITH THE WOODED AYRE SPATULA (WIDELY USED IN THE UNITED KINGDOM) AND WITH A PLASTIC SPATULA (ARMOVICAL) WERE COMPARED FOR THEIR ABILITY TO DETECT DYSPLASTIC CERVICAL EPITHELIAL AND ENDOCERVICAL CELLS. AT THE SAME TIME, THE VALUE OF TAKING DUPLICATE SMEARS WAS ASSESSED. PAIRED CERVICAL SMEARS WERE OBTAINED AT A SINGLE ATTENDANCE FROM 21,352 WOMEN, USING THE 2 TYPES OF SPATULAS IN FOUR DIFFERENT SEQUENCES. ALTHOUGH INDIVIDUALLY THE ARMOVICAL PROVED SUPERIOR TO THE AYRE SPATULA FOR THE COLLECTION OF ENDOCERVICAL EPITHELIAL MATERIAL, THIS ADVANTAGE WAS NOT COMPLEMENTED BY ANY MARKED IMPROVEMENT IN ITS DETECTION OF CERVICAL DYSPLASIA. PAIRED SMEAR SAMPLING, HOWEVER, WAS CLEARLY MORE REWARDING IN THIS RESPECT AND ALSO ALLOWED THE INTRODUCTION OF LABORATORY QUALITY CONTROL, AS EACH PREPARATION OF ANY GIVEN PAIR WAS EXAMINED BY A DIFFERENT SCREENER. THE FALSE-NEGATIVE RATE WAS 18.5%. IT COMPRIVED 11.1% SAMPLING ERROR AND 7.4% SCREENING ERROR. THE STUDY CONCLUDED THAT PAIRED SAMPLING IN POPULATION SCREENING WOULD SIGNIFICANTLY REDUCE THE FALSE NEGATIVE RATE.


LANGUAGE: ENGLISH
AUTHORS: 01) BENEDET JL 02) ANDERSON GM
SUBJECTS: 01) CERVIX NEOPLASMS/DIAGNOSIS 02) CERVIX NEOPLASMS/OCURRENCE 03) CYTOLOGY
DOCUMENTS: 01) GYNECOL ONCOL 02) CRT 457:61-72
LOCATION: CANADA-BRITISH COLUMBIA

THE ADDITION OF A CENTRALLY DIRECTED COLPOSCOPY WILL RESULT IN EVEN GREATER BENEFITS FOR WOMEN OF THE PROVINCE. THE REAL VALUE OF THE COLPOSCOPY LIES IN ITS ABILITY TO IMPART GREATER FLEXIBILITY IN THE INVESTIGATION AND SUBSEQUENT MANAGEMENT OF PATIENTS WITH ABNORMAL CERVICAL CYTOLOGY. ALTERNATIVE THERAPEUTIC MODALITIES TO MANAGE INTRAEPITHELIAL LESIONS WITH METHODS OTHER THAN CONE BIOPSY OR HYSTERECTOMY ARE ESSENTIAL IN COMMUNITIES WHERE CYTOLOGY REPORTING IS NOT HIGHLY RELIABLE. COLPOSCOPY MAY STILL BE OF VALUE AS A DIAGNOSTIC METHOD, PROVIDED AN ADDITIONAL ASSESSMENT IS MADE OF PATIENTS WITH ABNORMAL SMEARS WHO MIGHT DEVELOP DIAGNOSTIC DIGNIZATION BUT NO SIGNIFICANT PATHOLOGY.

INVASIVE CERVICAL CANCER IN A CYTOLOGICALLY SCREENED POPULATION.


LANGUAGE: ENGLISH

AUTHORS: 01) BJERRE B 02) JOHANSSON S

SUBJECTS: 01) CERVIX NEOPLASMS/OCURRENCE 02) CYTOLOGY 03) NEOPLASM INVASIVENESS

DOCUMENTS: 01) ACTA OBSTET C GYNECOL SCAN 02) CRT 457:73-78

LOCATION: SWEDEN

IN MALMO, SWEDEN, LESS THAN 10% OF 20 TO 69 YEAR OLD WOMEN WERE EXAMINED CYTOLOGICALLY IN 1960. BY 1970 WERE EXAMINED, BUT THE INCIDENCE OF INVASIVE CERVICAL CANCER HAD DECREASED BY 48%. IN SPITE OF CONTINUED SCREENING AND RESCREENING, NO FURTHER DECREASE OCCURRED DURING THE 1970s. IN 101 CASES, INVASIVE CERVICAL CANCER WAS DIAGNOSED IN WOMEN PREVIOUSLY SCREENED. THE SMEARS OF 80 OF THESE SHOWED CHANGES MORE THAN A YEAR BEFORE THE DIAGNOSIS. 30 WOMEN REFUSED EXAMINATION OR THE RAPIDITY IN 60 CASES OF MILD-MODERATE ATYPIA, FURTHER EXAMINATION CONSISTED SOLELY OF A CYTLOGIC CHECK-UP. THE AUTHORS BELIEVE THAT A MORE ACTIVE EXAMINATION PROGRAM, INCLUDING COLPOSCOPY IN CASES OF CYTOLOGIC ATYPIA, WILL BE THE MOST IMPORTANT STEP TOWARDS FURTHER REDUCTION IN THE FREQUENCY OF INVASIVE CERVICAL CANCER.


LANGUAGE: ENGLISH

AUTHORS: 01) BOYES DA 02) KNOWELDEN J 03) PHILLIPS AJ

SUBJECTS: 01) CANCER/PREVENTION & CONTROL 02) CERVIX NEOPLASMS

DOCUMENTS: 01) BR J CANCER 02) CRT 457:79-81

THE ASSESSMENT OF A SCREENING PROCEDURE FALLS INTO TWO PARTS: FIRST DEVELOPMENT OF A TEST AND ESTABLISHMENT OF CRITERIA OF SPECIFICITY AND SENSITIVITY; THE SECOND, APPLICATION OF THE TEST TO THE GENERAL POPULATION, WITH ATTENTION TO THE NATURAL HISTORY OF THE DISEASE AND TO THE USEFULNESS AND SIMPLICITY OF THE TEST ITSELF. THE DECISION TO ORGANIZE A SCREENING PROGRAM IS OFTEN BASED UPON INCOMPLETE INFORMATION IN A POPULATION SUBJECTED TO CONSTANT CHANGE. IT IS THE HOPE OF THE COMMITTEE ON CANCER PREVENTION AND DETECTION OF THE UICC THAT THE CONCLUSIONS FROM THE SYMPOSIUM WILL PROVE HELPFUL TO ALL WHO FACE SUCH DECISIONS. THERE WAS UNANIMOUS AGREEMENT THAT (1) EXFOLIATE CYTOLOGY OF THE CERVIX WAS A VALUABLE TEST BOTH IN GYNECOLOGICAL DIAGNOSIS AND IN SCREENING.
APPEARENTLY HEALTHY WOMEN, AND THAT A LABORATORY FACILITY UNDER A TRAINED CYTOLOGIST, SHOULD BE AVAILABLE WHENEVER CONSULTATIVE MEDICINE IS AVAILABLE: (2) THE USE OF THIS TEST AS A POPULATION SCREENING PROCEDURE PROMISED USEFUL YIELDS IN PRE-INVASIVE OR EARLY STAGES OF CANCER AND POTENTIAL REDUCTION IN MORTALITY.


THE SCREENING PROJECT FOR CERVICAL CANCER IN THE PROVINCE OF BRITISH COLUMBIA, CANADA HAS BEEN ASSOCIATED WITH A DROP IN INCIDENCE OF 75% OF CLINICAL SQUAMOUS CARCINOMA IN WOMEN OVER THE AGE OF 20, AND A DROP IN INCIDENCE OF MORTALITY OF CLOSE TO 60%. THE WHOLE POPULATION RATES FOR THE DISEASE WERE APPROXIMATELY 5.1/100,000 FOR INCIDENCE AND 2.5/100,000 FOR MORTALITY IN 1977. IT IS THE VIEW OF THE AUTHORS THAT THE VALUE OF SCREENING OF THE CERVIX BY MEANS OF PAPANICOLAOU SMEAR BEEN ESTABLISHED. THE AUTHORS BELIEVE THAT COLPOSCOPY IS A USEFUL ADDITION TO A SCREENING PROGRAM AND THAT THE SERVICE MUST BE SET UP WITH GREAT CARE BECAUSE OF THE SHIFT IN RESPONSIBILITY FROM THE PATHOLOGIST TO THE COLPOSCOPIST. THE INTRODUCTION OF COLPOSCOPY DOES CAUSE A CHANGE IN PATHOLOGICAL INTERPRETATION AND IN CANCER REGISTRY DATA THAT ARE SIGNIFICANT. IN THE PROVINCE, DATA COLLECTED PRIOR TO 1974 CANNOT BE COLLATED WITH DATA PRODUCED AFTER THE INTRODUCTION OF COLPOSCOPY.

CANCER CONTROL: IMPLICATIONS FROM ITS HISTORY. PP. 15, Refs. 74.

0050605 - DETECTION OF UTERINE CANCER: RESULTS OF A COMMUNITY PROGRAM OF 17 YEARS.
PP. 11, REFS. 19.

LANGUAGE: ENGLISH

AUTHORS: 01) BURNS EL 04) SEIDMAN H
02) HAMMOND EC 05) GORSKI TW
03) PERCY C

SUBJECTS: 01) CERVIX NEOPLASMS/DIAGNOSIS
02) CERVIX NEOPLASMS/OCURRENCE
03) CYTOLOGY
04) NEOPLASM INVASIVENESS

DOCUMENTS: 01) CANCER
02) CRT 457:146-57

LOCATION: US

THE TOLEDO, OHIO, USA COMMUNITY PROGRAM (1947-1963) FOR THE DETECTION OF UTERINE CANCER IS DESCRIBED AND ANALYZED. THE RESULTS INDICATE SUCCESS OF A SELF-SUPPORTING COMMUNITY PROGRAM CONDUCTED BY PRACTICING PHYSICIANS FROM THEIR OFFICES. THE PROGRAM ENCOMPASSED MORE THAN TWO-THIRDS OF THE WOMEN OVER 30 YEARS OF LUCAS COUNTY, OHIO. IT RESULTED IN A LARGE DECREASE IN INVASIVE CANCER OF THE UTERUS. SURVIVAL RATES FOLLOWING DIAGNOSIS OF INVASIVE CANCER OF THE UTERUS WERE SUPERIOR TO THOSE USUALLY SEEN.

0050606 - ECONOMIC CONSIDERATIONS OF THE CONTROL OF CERVIX CANCER IN HIGH RISK PATIENTS.
PP. 4, REFS. 2.

LANGUAGE: ENGLISH

AUTHORS: 01) CHRISTOPHERSON WM 02) PARKER JE

SUBJECTS: 01) CERVIX NEOPLASMS/PREVENTION & CONTROL
02) CYTOLOGY

DOCUMENTS: 01) CA
02) CRT 457:158-60

LOCATION: US

CANCER OF THE CERVIX IS A CONTROLLABLE DISEASE. THE COST OF EARLY DETECTION BY ROUTINE CYTOLOGICAL SCREENING IS SIGNIFICANT BUT NOT EXCESSIVE FOR MANY PERSONS AND COUNTRIES WHERE THE HIGH COST OF CANCER CONTROL PRESENTS A MAJOR PROBLEM. HIGH RISK GROUPS MAY BE IDENTIFIED AND SELECTED FOR SCREENING, THEREBY REDUCING THE COST TO REASONABLE LEVELS.

0050607 - CONTROL OF CERVIX CANCER IN WOMEN OF LOW INCOME IN A COMMUNITY.
PP. 6, REFS. 3.

LANGUAGE: ENGLISH

AUTHORS: 01) CHRISTOPHERSON WM 02) PARKER JE

SUBJECTS: 01) CERVIX NEOPLASMS/PREVENTION & CONTROL
02) CYTOLOGY
03) NEOPLASM INVASIVENESS

DOCUMENTS: 01) CANCER
02) CRT 457:161-66

LOCATION: US

A PROGRAM TO CONTROL CANCER OF THE UTERINE CERVIX IN EQUAL NUMBERS OF BLACK AND WHITE WOMEN OF LOW-INCOME LEVEL IN LOUISVILLE, KENTUCKY, (USA)
OVER A 12-YEAR PERIOD IS DESCRIBED. INITIAL SATISFACTORY EXAMINATIONS WERE OBTAINED OF 37,209 WOMEN. RESCREENING AT INTERVALS OF 1 TO 12 YEARS TOALED 51,063 EXAMINATIONS. PREVALENCE RATES OF CYTOLOGICAL DETECTED CERVIX CARCINOMA WERE VERY HIGH--3.75 PER 1000 FOR INVASIVE SQUAMOUS CARCINOMA AND 4.41 FOR CARCINOMA IN SITU. THE FIRST REPEAT EXAMINATION BASED ON PATIENT YEARS FELL TO 0.67 AND 1.46 PER 1000 WOMEN FOR THESE TWO LESIONS. THE DECREASE CONTINUED TO 60.9% OF THE TOTAL CASES DURING THE YEARS OF SCREENING. THE DATA PRESENTED REVEALED THAT MORTALITY RATES FROM CERVIX CANCER REFLECT A DECREASE IN INCIDENCE AND AN INCREASE IN EARLY DIAGNOSED CASES.

CERVICAL CANCER REMAINS THE MOST COMMON FORM OF CANCER ON A WORLD-WIDE BASIS. THE CHALLENGE TO CONTROL THE DISEASE MUST BE MET. THE DECREASE IN MORTALITY OBSERVED IN CANADA AND ESPECIALLY IN THE UNITED STATES DOES NOT SEEM TO HAVE BEEN DEMONSTRATED ELSEWHERE. ONE PLAUSIBLE EXPLANATION FOR THIS IS THAT EFFECTIVE SCREENING HAS NOT YET BEEN ACCOMPLISHED COLLECTIVELY, WE HAVE NOT BEEN WILLING TO SPEND SUFFICIENT TIME, ENERGY, OR RESOURCES ON CERVIX CANCER CONTROL. SPORADIC AND LIMITED SCREENING COVERAGE WILL HAVE LITTLE, IF ANY, EFFECT ON MORBIDITY AND MORTALITY TRENDS. EQUALLY IMPORTANT IS THE QUALITY OF CYTOLOGY. THE PATHOLOGICAL EXPERTISE, THE SKILLFUL CLINICAL MANAGEMENT, AND OTHER FACTORS INHERENT IN A SOUND PROGRAM. THESE ARE THE VARIABLES THAT THE EUROPEAN SOCIETY OF CYTOLOGY IS ATTEMPTING TO IMPROVE.

DATA FROM A 21-YEAR PERIOD ARE PRESENTED TO EVALUATE THE EFFECTS OF A MASS CYTOLOGIC SCREENING PROGRAM ON UTERINE CANCER MORBIDITY AND MORTALITY IN LOUISVILLE, KENTUCKY, (USA). THE SUCCESS OF SCREENING WAS GREAT IN THE YOUNGER AGE GROUPS. WOMEN AT HIGH RISK FOR CERVICAL CANCER IN THE LOW SOCIO-ECONOMIC QUARTILES HAD A BETTER INITIAL SCREENING RATE THAN THE TWO MIDDLE-INCOME QUARTILES AND HAD THE HIGHEST RATE OF ALL WOMEN IN SUBSEQUENT RESCREENING. THE GREATEST DECREASE IN BOTH MORBIDI
TY AND MORTALITY WAS IN WOMEN UNDER 50 YEARS. WOMEN AGE OF 30-39 AND 50-
59 BENEFITTED THE MOST, AS MEASURED BY MORTALITY, WITH A DECREASE OF
70.8% AND 80.0%, RESPECTIVELY. THERE WAS NO CHANGE IN MORTALITY RATES FOR
THOSE 70 YEARS AND OLDER. ALTHOUGH THERE WAS INDIVIDUAL BENEFIT AMONG THE
SCREENING WITH ENDOMETRIAL CARCINOMA, THE AVERAGE ANNUAL AGE-ADJUSTED
RATE INCREASE WAS FROM 13.2 TO 15.3/100,000 OVER THE 21-YEAR PERIOD.

0050610 - DOES SCREENING BY "PAP" SMEARS HELP PREVENT CERVICAL CANCER? A CASE-
CONTROL STUDY. PP. 4, REFS. 12.

LANGUAGE: ENGLISH
AUTHORS: 01) CLARKE EA 02) ANDERSON TW
SUBJECTS: 01) CERVIX NEOPLASMS/DIAGNOSIS
02) CERVIX NEOPLASMS/PREVENTION & CONTROL
03) CYTOLOGY
04) NEOPLASM INVASIVENESS
DOCUMENTS: 01) LANCET
02) CRT 457:182-85
LOCATION: CANADA

THE PAP SMEAR HISTORY OF 212 CASES OF INVASIVE CERVICAL CANCER WAS
COMPARED WITH THAT OF 1060 AGE-MATCHED CONTROLS OF NEIGHBORS, DURING THE
FIVE YEARS BEFORE DIAGNOSIS. 32% OF THE CASES AND 50% OF THE CONTROLS
HAD BEEN SCREENED BY PAP SMEAR. THIS DIFFERENCE WAS STATISTI-CALLY
HIGHLY SIGNIFICANT (P<0.001) AND INDICATED A RELATIVE RISK OF
INVASIVE CANCER OF 2.7 IN WOMEN WHO HAD NOT BEEN SCREENED BY THE PAP
SMEAR AS COMARED WITH THOSE WHO HAD. DIFFERENCES IN PAP SMEAR HISTORY
BETWEEN CASES AND CONTROLS PERSISTED WHEN THE DATA WERE STRATIFIED BY
AGE, INCOME, EDUCATION, MARITAL HISTORY, SMOKING HABIT, EMPLOYMENT
STATUS, AND ACCESS TO MEDICAL CARE. THESE RESULTS SUPPORT THE USE OF PAP
SMEAR AS AN EFFECTIVE SCREENING PROCEDURE FOR INVASIVE CERVICAL CANCER.

0050611 - VALIDATION OF SCREENING PROCEDURES. PP. 8, REFS. 37.

LANGUAGE: ENGLISH
AUTHORS: 01) COCHRANE AL 02) HOLLAND WW
SUBJECTS: 01) CANCER/DIAGNOSIS
02) CANCER/Epidemiology
03) CERVIX NEOPLASMS
DOCUMENTS: 01) BR MED BULL
02) CRT 457:186-91

THE FIRST PART OF THIS PAPER DESCRIBES THE IMPLICATIONS OF SCREENING IN
CLINICAL PRACTICE AND ASSESSSES THE VALUE OF SCREENING TESTS CURRENTLY IN
USE. THE SECOND PART IS CONCERNED WITH ONE PARTICULAR ASPECT OF THE
EVALUATION OF SCREENING PROCEDURES--THE EFFICIENCY OF THE TESTS USED.
THIS SECTION IS EQUALLY APPLICABLE TO CLINICAL AND TO EPIDEMIOLOGICAL
WORK.

0050612 - TRENDS IN CERVICAL CANCER AND CARCINOMA IN SITU IN GREAT BRITAIN.
PP. 8, REFS. 23.

LANGUAGE: ENGLISH
AUTHORS: 01) COOK GA 02) DRAPER GJ
Doubts have frequently been expressed about the effectiveness of the screening program for cervical cancer in Britain. These doubts have been reinforced as a result of recent increases in mortality from this disease among younger women. In this paper the author discusses trends in registration and mortality data, relates these to the level of screening, and concludes that screening may in fact have had a considerable impact on mortality rates. Should Incidence rates continue to change it will be necessary to monitor the screening program in order to make the best use of resources available for cervical cytology.

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**LANGUAGE:** ENGLISH

**AUTHORS:** 01) COPPLESON LW 02) BROWN LB

**SUBJECTS:** 01) CERVIX NEOPLASMS/INCIDENCE
02) CERVIX NEOPLASMS/PREVENTION & CONTROL
03) CYTODYLOGY
04) NEOPLASMS INVASIVENESS

**DOCUMENTS:** 01) AM J OBSTET GYNECOL
02) CRT 457:201-07

Annual exfoliative cytologic examination is recommended by many physicians and by the American Cancer Society. A method to assess the cost and the benefit of this service in comparison with competing health care measures is presented. This method provides a strategy to identify if a specific number of tests were given to each woman during her lifetime, we could calculate the ages at which the tests would yield information that would have the maximum impact on the disease. Having developed such a strategy we could examine the cost and specify the benefits of each additional screening. In the present study, the most suitable large-scale surveys of incidence and prevalence of abnormal cervical malignancies were used to develop mathematical models of biologic changes of the cervix. The effectiveness of the different strategies of screening was examined according to selected criteria, and near-optimal strategies calculated. The overall cost of the tests was then deduced from these strategies. Further research is needed to develop the most cost-effective method.

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**THE ROLE OF CERVICAL CYTOLOGY IN THE DECLINING MORBIDITY AND MORTALITY OF CERVICAL CANCER.** PP. 9, REFS. 29.

**LANGUAGE:** ENGLISH

**AUTHOR:** CRAMER DW

**SUBJECTS:** 01) CERVIX NEOPLASMS/MORTALITY
02) CERVIX NEOPLASMS/STATISTICS
03) CYTODYLOGY
04) NEOPLASMS INVASIVENESS

**DOCUMENTS:** 01) CANCER
02) CRT 457:208-17
THE MORBIDITY AND MORTALITY OF CERVICAL CANCER HAVE DECREASED OVER THE
PAST TWO DECADES. TO APPRECIATE THE ROLE OF CYTOLOGY IN THIS CHANGE, IT
IS NECESSARY TO HAVE A BASIC UNDERSTANDING OF THE RELATIONSHIP BETWEEN
IN SITU AND INVASIVE CERVICAL CARCINOMA. A CAUSAL RELATIONSHIP BETWEEN
THE TWO IS SUGGESTED BY EVIDENCE FROM CLINICAL AND PATHOLOGICAL STUDIES
OF THE POPULATION DYNAMICS OF CERVICAL CARCINOMA. THIS STUDY ASSOCIATED
WITH TRENDS IN THE MORBIDITY & MORTALITY OF CERVICAL CANCER DEMONSTRATES
THAT THE CHANGE IN TRENDS IS COMPATIBLE WITH THE USE OF CYTOLOGIC SCREEN
ING. THERE IS A POSITIVE CORRELATION BETWEEN THE RATE OF CYTOLOGIC SCREEN
NING AND THE DECREASE IN MORBIDITY AND MORTALITY OF CERVICAL CANCER IN
VARIOUS PARTS OF THE UNITED STATES.

IS PERIODIC HEALTH EXAMINATION WORTHWHILE? PP. 4, REFS. 12.
CANCER 47(MAR): 1210-14, 1981. (SUPPL)

A BALANCED ASSESSMENT OF THE VALUE OF PERIODIC HEALTH EXAMINATION RE
QUIRE DEFINITION OF THE CONTENT AND METHOD OF THE EXAMINATION, THE INDIVIDUALS TO BE EXAMINED, AND ITS FREQUENCY. METHODS TO DETERMINE HEALTH HAZARDS OR RISK FACTORS HAVE BEEN DEVELOPED WHICH ENABLE DESIGN OF MORE EFFICIENT PERIODIC HEALTH EXAMINATION AND SPECIFY THE SUBGROUPS MOST APT TO HAVE PRESYMPTOMATIC DISEASE. REFINEMENT OF RISK-RELATED EXAMINATION HARBORING PRESYMPTOMATIC DISEASE. REFINEMENT OF RISK-RELATED EXAMINATION AS A BASIC TOOL IN MEDICAL PRACTICE.

EFFECT OF CERVICAL CANCER SCREENING IN SCANDINAVIA. PP. 5, REFS. 11.

MASS SCREENING PROGRAMS FOR CANCER OF THE CERVIX WERE INTRODUCED AT DIFFERENT TIMES AND TO DIFFERENT EXTENTS IN THE SCANDINAVIAN COUNTRIES. ICELAND AND FINLAND INTRODUCED NATIONWIDE SCREENING PROGRAMS IN THE EARLY 1960s. TEN YEARS AFTER INTRODUCTION, MARKED REDUCTIONS IN INCIDENCE AND MORTALITY OF INVASIVE CERVICAL CANCER WERE OBSERVED, SPECIFICALLY THE AGE GROUPS TARGETED FOR SCREENING. IN SWEDEN AND DENMARK MASS SCREENING WAS INTRODUCED ON A COUNTY BASIS. CHANGES IN INCIDENCE AND DEATH RATES FROM CERVICAL CANCER WERE RECORDED WHICH REFLECTED THE DEGREE TO WHICH ORGANIZED MASS SCREENING HAD BEEN INTRODUCED. THE DATA DEMONSTRATE THAT MASS SCREENING EVERY TWO TO FIVE YEARS CAN REDUCE THE DEGREE OF INVASIVE CERVICAL CANCER BY 80%. NO EVIDENCE IS AVAILABLE FROM SCANDINAVIA THAT MORE FREQUENT SCREENING REDUCES THE RISK FURTHER.
CERVICAL CANCER


LANGUAGE: ENGLISH

AUTHOR: 01) DICKINSON LE

SUBJECTS: 01) CERVIX NEOPLASMS/MORTALITY
02) CERVIX NEOPLASMS/PREVENTION & CONTROL
03) CYTOLOGY

DOCUMENTS: 01) GYNECOL ONCOL
02) CRT 487:228-36

LOCATION: US

A STUDY OF THE EFFECTIVENESS OF THE PAP SMEAR IN THE CONTROL OF CANCER OF THE UTERINE CERVIX IS PRESENTED IN TERMS OF LONG-TERM TIME TRENDS IN THE (A) LEVEL OF POPULATION SCREENING, (B) INTERVALS BETWEEN TESTS, (C) INCIDENCE, (D) MORTALITY (E) SURVIVORSHIP. THE RESULTS SUGGESTED THAT SCREENING HAS DECREASED MORTALITY AND IMPROVED SURVIVORSHIP. A COST-BENEFIT ANALYSIS ESTIMATED THAT EACH YEAR OF ADDITIONAL LIFE COSTS ABOUT $200. SUGGESTIONS ARE MADE FOR A PRACTICAL CONTROL PROGRAM BASED ON CYTOLOGIC SCREENING.


LANGUAGE: ENGLISH

AUTHORS: 01) DICKINSON L
02) SOULE EH
03) MUSSEY ME
04) KURLAND LT

SUBJECTS: 01) CERVIX NEOPLASMS/MORTALITY
02) CERVIX NEOPLASMS/DETECTION
03) CYTOLOGY

DOCUMENTS: 01) MAYO CLIN PROC
02) CRT 487:237-47

LOCATION: US

IN OLMEASTED COUNTY, MINNESOTA, (USA) THE CRUDE AVERAGE ANNUAL INCIDENCE OF CERVICAL CANCER PER 100,000 POPULATION HAS INCREASED FROM 19.3 IN 1935-1944 TO 53.4 IN 1955-1964. THE INCIDENCE WAS INCREASING EVEN BEFORE THE INTRODUCTION OF THE PAPANICOLAOU SMEAR IN 1947. AVAILABLE EVIDENCE SUGGESTS THAT UNDER ASCERTAINMENT IN THE EARLY YEARS DOES NOT EXPLAIN ALL OF THIS UPWARD TREND. THE CONTINUING UPWARD TREND AFTER THE INTRODUCTION OF THE PAPANICOLAOU TECHNIQUE IS PARTLY DUE TO INCLUDING EXISTING CASES DISCOVERED BY CYTOLOGIC SCREENING (PREVALENCE CASES). ALTHOUGH IT IS NOT POSSIBLE TO SAY EXACTLY WHAT THE TRUE INCIDENCE OF NEW CASES IS, IT MAY BE INFERRED THAT THE TRUE INCIDENCE HAS BEEN INCREASING CONTINUOUSLY SINCE 1946. THE INCIDENCE OF INVASIVE CERVICAL CANCER IN THE POPULATION HAS DECLINED BY 40%. THE MORTALITY RATE HAS ALSO DECLINED FROM 5/100,000 TO 7/100,000 POPULATION BEFORE 1960 TO 3/100,000 AFTER 1960. THE PROBABILITY OF THIS DECREASE OCCURRING BY CHANCE WAS BETWEEN 5% AND 10% EVIDENCE IS PRESENTED SUPPORTING EARLY DETECTION AND TREATMENT.


LANGUAGE: ENGLISH
AUTHORS: 01) DICKINSON L  
02) MUSSEY L  
03) KURLAND LT

SUBJECTS: 01) CERVIX NEOPLASMS/DIAGNOSIS  
02) CERVIX NEOPLASMS/STATISTICS  
03) CYTOLOGY

DOCUMENTS: 01) MAYO CLIN PROC  
02) CRT 457:248-52


AUTHORS: 01) DU TOIT JP  
02) VAN NIEKERK WA

SUBJECTS: 01) CERVIX NEOPLASMS/DIAGNOSIS  
02) CERVIX NEOPLASMS/OCURRENCE  
03) CYTOLOGY

DOCUMENTS: 01) OBSTET GYNECOL  
02) CRT 457:253-57

ROUTINE CYTOLOGIC SCREENING OF FEMALE POPULATION HAS REPEATEDLY DEMONSTRATED ITS VALUE AS A TECHNIQUE FOR THE EARLY DETECTION OF PELVIC NEOPLASIA. UNFORTUNATELY, IT IS ALSO TRUE THAT PATIENTS NEEDING THIS EXAMINATION RARELY REQUEST CYTOLOGIC SCREENING DESPITE ENCOURAGEMENT AND PROPAGANDA, THIS IS ESPECIALLY TRUE IN COUNTRIES WHERE THERE ARE OFTEN MORE PRESSING PROBLEMS, SUCH AS VACCINATION AGAINST SMALLPOX, PROPER CONTROL OF VENEREAL DISEASE, MALNUTRITION, AND POPULATION EXPLOSION. CYTOLOGIC SCREENING SHOULD BE UTILIZED IN SITUATIONS WHERE WOMEN MAKE REGULAR MEDICAL VISITS FOR ANY PURPOSE. ROUTINE VAGINAL CYTOLOGIC SCREENING IN NONGYNECOLOGIC ADMISSIONS TO TYGERBERG HOSPITAL REVEALED A DETECTION RATE FOR PELVIC NEOPLASIA OF 9.3/1000 PATIENTS. FIFTY-SEVEN PERCENT OF THOSE DETECTED WERE STILL IN THE SITU STAGE AND SHOULD SURVIVE FOR FIVE YEARS. THE TREATMENT WAS COMPLETE IN 54.4% OF THE CASES. SINCE THIS SERVICE IS ROUTINELY PERFORMED BY NURSING PERSONNEL, THE PROGRAM APPEARS TO BE SOUND FINANCIALLY.

AUTHOR: 01) EDDY DM
CERVICAL CANCER

(CONTINUED)

SUBJECTS: 01) CANCER/EPIDEMIOLOGY 02) CERVIX NEOPLASMS/DIAGNOSIS 03) CERVIX NEOPLASMS/STATISTICS 04) COST ANALYSIS 05) CYTOLOGY 06) NEOPLASM INVASIVENESS

DOCUMENTS: 01) GYNECOL ONCOL 02) CRT 457:258-77

LOCATION: US

FOR THE PAP TEST TO BE APPROPRIATE FOR THE EARLY DETECTION OF CERVICAL CANCER, THERE SHOULD BE GOOD EVIDENCE THAT IT IS EFFECTIVE, THAT ITS EXPECTED BENEFITS OUTWEIGH RISKS, AND THAT ITS COSTS ARE REASONABLE. ALTHOUGH THE VALUE OF THE PAP TEST HAS NEVER BEEN DETERMINED IN A RANDOMIZED CONTROLLED TRIAL, ITS EFFECTIVENESS HAS BEEN DEMONSTRATED INDIRECTLY IN DOZENS OF CLINICAL AND EPIDEMIOLOGICAL STUDIES CONDUCTED OVER THE PAST THREE DECADES. THIS PAPER REVIEWS THAT EVIDENCE. IT ALSO EXAMINES IN DETAIL THE EFFECTIVENESS, COST, AND POTENTIAL RISKS OF DELIVERING THE TEST AT VARIOUS FREQUENCIES. ISSUES DISCUSSED INCLUDE THE YIELD OF INVASIVE CANCERS, THE RESULTS OF LARGE SCREENING PROGRAMS IN WHICH THE TEST WAS DELIVERED AT DIFFERENT FREQUENCIES, STATISTICAL ESTIMATES OF "COST/EFFECTIVENESS" OF SCREENING AT DIFFERENT FREQUENCIES, THE FALSE NEGATIVE RATE, LABORATORY QUALITY CONTROL, AND THE SCREENING OF HIGH RISK WOMEN.


LANGUAGE: ENGLISH

AUTHOR: 01) EDDY DM

SUBJECTS: 01) CERVIX NEOPLASMS/PREVENTION & CONTROL 02) LIFE EXPECTANCY/STATISTICS

DOCUMENTS: 01) CANCER 02) CRT 457:278-87

LOCATION: US


LANGUAGE: ENGLISH

AUTHORS: 01) ELWOOD JM 02) COTTON RE 03) JOHNSON JE 04) JONES GM 05) CURNOW J 06) BEAVER MW

SUBJECTS: 01) CERVIX NEOPLASMS/DIAGNOSIS 02) CERVIX NEOPLASMS/STATISTICS 03) CYTOLOGY

DOCUMENTS: 01) BR MED J /CLIN RES/ 02) CRT 457:288-92
THE OUTCOME WAS ASSESSED FOR ALL 1062 WOMEN IN NOTTINGHAM, ENGLAND, WHO HAD A FIRST REPORT OF ABNORMAL CERVICAL CYTOLOGY IN 1981. SATISFACTORY FOLLOW UP WAS FOUND FOR 628 (59%). FOR 275 (26%) ONE SUBSEQUENT SMEAR HAD BEEN REPORTED BUT NO FURTHER FOLLOW UP REQUESTED. FOR 43 (4%) NO SUBSEQUENT TEST, AFTER THE ABNORMAL SMEAR, HAD BEEN REQUESTED BY THE PATIENT'S PRACTITIONER. THIRTY PATIENTS (3%), 22 OF WHOM HAD BEEN TESTED AT A SPECIAL CLINIC, HAD NOT RESPONDED TO A REQUEST FOR FOLLOW UP. EVEN AFTER EXTENSIVE EFFORTS THE INVESTIGATORS COULD NOT FIND THE OUTCOME IN THE REMAINING 86 (8%) OF THE PATIENTS. ADEQUATE FOLLOW UP OF PATIENTS WITH ABNORMAL CERVICAL CYTOLOGY IS NOT BEING ACHIEVED. IMPROVEMENTS IN THE RECORDS SYSTEM AND SOME CHANGES IN PROCEDURE SHOULD BE MADE TO REDUCE THIS PROBLEM.

FALSE-NEGATIVE CYTOLOGY IN INVASIVE CANCER OF THE CERVIX. PP. 8, REFS. 13.

THE ACCESS OF EARLY DIAGNOSIS OF CYTOLOGY IN INVASIVE CANCER (CIC) IS EXFOLIATE CYTOLOGIC SCREENING OF THE CERVICOVAGINAL AREA. THE ACHILLES HEEL IN THIS TREMENDOUSLY VALUABLE SCREENING PROCESS IS THE HIGH FALSE NEGATIVE RATE. THE FALSE NEGATIVE RATE CAN BE DIMINISHED IN THE MAJORITY OF PATIENTS BY RIGID ADHERENCE TO INDICATIONS FOR SCREENING, SCREENING TECHNIQUES, PROPER INTERPRETATION AND REPORTING, UTILIZATION, WHERE INDICATED, OF ADJUVANT DIAGNOSTIC METHODS SUCH AS MULTIPLE BIOPSY, COLPOSCOPY, AND MAINTENANCE OF THE ANNUAL SCREENING SCHEDULE.

CERVICAL CANCER DETECTION IN BRITISH COLUMBIA. PP. 12, REFS. 9.

THIS PAPER PRESENTS DATA FROM THE SCREENING PROGRAM IN THE PROVINCE OF BRITISH COLUMBIA, CANADA. A SIGNIFICANT REDUCTION IN THE INCIDENCE OF INVASIVE DISEASE HAS BEEN ACHIEVED. MORTALITY RATES MAY BE FALLING, BUT THE TREND IS NOT YET DEFINITELY ESTABLISHED. THE PROBLEMS OF EVALUATING THE DATA OF THE PROGRAM GROW MORE COMPLEX WITH PASSING YEARS. THE RESULTS CONTINUE TO SUPPORT THE THESIS THAT IN SITU CARCINOMA OF THE CERVIX IS
A precursor of invasive carcinoma and that its removal will result in a significant lowering of mortality from carcinoma of the cervix.


Language: English
Authors: 01) Fultz AM  02) Kelsey JL
Subjects: 01) Cancer/Therapy  02) Cervix Neoplasms/Diagnosis  03) Cervix Neoplasms/Prevention & Control  04) Cytology  05) Neoplasm invasiveness
Documents: 01) Milbank Mem Fund 0  02) CRT 457:315-51
Location: US

This paper examines the policies for the use of the Pap test. The authors review the scientific basis for establishing screening policies and assess the extent to which the Pap test meets these criteria. They question why the annual Pap test has been adopted as national policy in the United States despite serious questions about its usefulness. The Walton report and other studies discourage annual tests for women with several negative Pap smears and those who are at low risk for cervical cancer. In the United States the issue remains: who should have a Pap test and how often? It is most important that the Pap test be considered in terms of effectiveness in combating cervical cancer and not in terms of luring women to gynaecologists yearly for other examinations.


Language: English
Author: 01) Gad C
Subjects: 01) Cervix Neoplasms/Mortality  02) Cervix Neoplasms/Occurrence  03) Cytology  04) Neoplasm invasiveness
Documents: 01) Dan Med Bull  02) CRT 457:352-56
Location: Denmark

The aim of mass screening programs for carcinoma of the uterine cervix is to identify the disease as early as possible, preferably in the precancerous state, thereby increasing the cure rate and decreasing mortality. This report concerns the changes in mortality observed after cytological screening in Frederikssberg, Denmark. Calculation of the number of spared lives, by applying survival rates in expected and observed carcinomas, confirmed the following results obtained from mortality figures. In cases diagnosed within the age group 30-54 in 1962-1969, 21% were calculated as saved; in cases diagnosed in 1970-1972, 51% were saved. It is estimated that the risk of dying from carcinoma of the cervix in women who are screened is reduced at least by 60%.

LANGUAGE: ENGLISH

AUTHORS: 01) GAD C 02) OSTERGAARD E

SUBJECTS: 01) CERVIX NEOPLASMS/DIAGNOSIS 02) COST ANALYSIS 03) CYTOMETRY 04) NEOPLASM INVASIVENESS

DOCUMENTS: 01) DAN MED BULL 02) CRT 457:357-62

LOCATION: DENMARK

DURING FOUR CYTOLOGICAL SCREENINGS FOR CERVICAL CARCINOMA IN FREDERIKSBERG, DENMARK, FROM 1962 TO 1972, ABOUT 39,000 EXAMINATIONS WERE PERFORMED, LEADING TO THE DETECTION OF 208 PRECANCEROUS OR EARLY INVASIVE CASES. IT WAS ESTIMATED THAT 132 OF THESE WOMEN WOULD HAVE DEVELOPED CERVICAL DISORDERS IN MORE ADVANCED CLINICAL STAGES, AND THAT THE SCREENING HAD SAVED 36 WOMEN FROM PREMATURE DEATH. A MODIFIED COST-BENEFIT MODEL COMPARED THE ESTIMATED GROSS COST OF DIAGNOSIS AND TREATMENT AT SCREENING WITH THE NET COST. FIGURED BY SUBTRACTING THE ESTIMATED TREATMENT COST OF PREVENTED CASES. THE RESULTS OF THE STUDY INDICATED AN ECONOMIC BENEFIT FROM SCREENING FOR CARCINOMA OF THE UTERINE CERVIX.


LANGUAGE: ENGLISH

AUTHORS: 01) GARDNER JW 02) LYON JL

SUBJECTS: 01) CERVIX NEOPLASMS/MORTALITY 02) CERVIX NEOPLASMS/OCURRENCE 03) CERVIX NEOPLASMS/Prevention & Control 04) CYTOMETRY

DOCUMENTS: 01) PREV MED 02) CRT 457:363-75

LOCATION: US

THE CONSISTENT DECLINE OF CERVICAL MORTALITY IN THE UNITED STATES SINCE 1946 IS ATTRIBUTED TO CERVICAL CYTOLOGIC SCREENING. THIS REPORT REVIEWED DATA ON THE INCIDENCE AND MORTALITY OF CERVICAL CANCER TO EVALUATE THE EFFECT OF CYTOLOGIC SCREENING. THERE HAS BEEN LITTLE CHANGE IN MORTALITY TRENDS SINCE WIDESPREAD CYTOLOGIC SCREENING. INCIDENCE OF INVASIVE CERVICAL CANCER IN SPECIFIC GEOGRAPHIC AREAS HAS ALSO DECLINED. HOWEVER, A SHARP INCREASE HAS OCCURRED IN THE DIAGNOSIS OF CARCINOMA IN SITU PARALLELING INCREASES IN CYTOLOGIC SCREENING RATES.


LANGUAGE: ENGLISH

AUTHORS: 01) GEIRSSON G 02) JOHANNESSON G 03) TULINIUS H

SUBJECTS: 01) CANCER/CLASSIFICATION 02) CERVIX NEOPLASMS/DIAGNOSIS 03) CYTOMETRY 04) NEOPLASM INVASIVENESS
THE HISTOLOGICAL MATERIAL FROM PATIENTS WITH INVASIVE CERVICAL CARCINOMA DIAGNOSED IN ICELAND IN 1965-1974 WAS REVIEWED AND RETYPED IN ACCORDANCE WITH THE WHO CLASSIFICATION ON TUMORS. MASS SCREENING FOR UTERINE CANCER IN WOMEN AGED 25-59 LED TO AN INCREASED INCIDENCE OF CERVICAL CARCINOMA. DUE TO FINDING OF EARLY TUMORS (CLINICAL STAGES IA AND IB). THE INCREASE WAS MOST MARKED IN THE FIRST FIVE YEARS OF SCREENING (1965-1969). THE SCREENING DID NOT INCREASE THE INCIDENCE OF MORE ADVANCED STAGES. LONGER OBSERVATION IS NEEDED TO DETERMINE WHETHER A DECLINE WILL OCCUR IN SUCH TUMORS. ALL THE MAJOR HISTOLOGICAL TYPES OF CERVICAL CARCINOMA APPEAR TO PROGRESS AT THE SAME RATE THROUGH THE CLINICAL STAGES.

DURING THE YEARS 1961-1971, 2696 WOMEN DIED IN DENMARK FROM CERVICAL CANCER. THE AVERAGE ANNUAL MORTALITY PER 1000 WAS 0.23 AND WAS CONSTANT IN THIS PERIOD. THE MORTALITY WAS 0.30 IN THE CAPITAL WHERE A MASS SCREENING PROGRAM BEGAN IN 1966, AND 0.21 IN THE PROVINCES WHERE SCREENING WAS NEGLECTED. THE TIME TREND WAS ALSO CONSTANT. THE MORTALITY WAS LOW IN YOUTH, REACHING A LEVEL OF 0.30 AROUND 45 YEARS. SINGLE WOMEN HAD THE LOWEST MORTALITY; AMONG MARRIED WOMEN IT WAS DOUBLE; AMONG WIDOWS 2-4 TIMES HIGHER. AMONG DIVORCED WOMEN 4 TIMES HIGHER. WITHIN MARITAL GROUPS THE CAPITAL HAD HIGHER OR THE SAME RATES AS THE PROVINCES. IN THE PROVINCES DIVORCED HAD HIGHER RATES. THE LOWEST SOCIOECONOMIC GROUPS HAD THE HIGHEST DEATH RATES AT YOUNG AGES. THE EFFECTS OF TOTAL VERSUS AGE-SPECIFIC CASE-FINDING PROGRAM WERE ESTIMATED UNDER THREE CIRCUMSTANCES: NAMELY, THAT MASS SCREENING COULD REDUCE THE CERVICAL CANCER MORTALITY BY 10%, BY 50%, OR BY 100%. EVALUATION WAS MADE BY RELATING THE HYPOTHETICALLY PREVENTED CERVICAL CANCER DEATHS TO ALL CANCER DEATHS AND TO DEATHS FROM ALL CAUSES.
0050632  (CONTINUED)

THIS PAPER IS A BRIEF REACTION TO THE MODIFIED RECOMMENDATIONS OF THE AMERICAN CANCER SOCIETY (ACS) FOR EARLY CANCER DETECTION CHECKUPS. ACS DEFENDERS CLAIM THAT THE OBJECTIVE OF THE NEW GUIDELINES WAS TO DESIGN A SCREENING PROTOCOL THAT WOULD INCREASE HEALTH BENEFITS AND REDUCE COST AND EFFORT. DISCUSSION OF DIFFERING VIEWS FROM PROMINENT ORGANIZATIONS INCLUDING THE AMERICAN COLLEGE OF OBSTETRICIANS AND GYNECOLOGISTS HIGHLIGHTED THE PROBABLE DECREASE IN ANNUAL PELVIS EXAMS AS WELL AS THE MISINTERPRETATION BY PHYSICIANS AND THE PUBLIC OF HOW OFTEN HIGH-RISK WOMEN SHOULD BE SCREENED. EMPHASIS IS PLACED ON THE FACT THAT THE ACS MODIFICATIONS ARE "GUIDELINES, NOT RULES OR REGULATIONS.

0050633  - EPIDEMIOLOGICAL EVIDENCE FOR TWO COMPONENTS OF CERVICAL CANCER. PP. 5, REFS. 17.

LANGUAGE: ENGLISH
AUTHORS: 01) HAKAMA M 02) PENTTINEN J
SUBJECTS: 01) CANCER/EPIEDEMOLOGY
02) CERVIX NEOPLASMS/DIAGNOSIS
03) CERVIX NEOPLASMS/OCURRENCE
DOCUMENTS: 01) BR J OBSTET GYNAEOL
02) CRT 487:394-99
LOCATION: FINLAND


0050634  - SELECTIVE SCREENING FOR CERVICAL CANCER: EXPERIENCE OF THE FINNISH MASS SCREENING SYSTEM. PP. 6, REFS. 9.

LANGUAGE: ENGLISH
AUTHORS: 01) HAKAMA M 02) PUUKALA E
SUBJECTS: 01) CERVIX NEOPLASMS/DIAGNOSIS
02) CERVIX NEOPLASMS/OCURRENCE
03) CYTOLOGY
04) NEOPLASM INVASIVENESS
DOCUMENTS: 01) BR J PREV SOC MED
02) CRT 457:400-06
LOCATION: FINLAND

WOMEN ELIGIBLE TO BE SCREENED FOR CERVICAL CANCER WERE TAKEN FROM THE NATIONAL POPULATION REGISTRY WERE INVITED BY A PERSONAL LETTER TO PARTICIPATE IN THE PROGRAM. THE DATA FROM THESE MASS SCREENINGS WERE ADJUSTED AND STORED AT THE SCREENING REGISTRY. TO REDUCE THE COST OF THE SYSTEM AND TO INCREASE THE YIELD OF PREINVASIVE LESIONS, THE IDEA OF SELECTIVE SCREENING WAS CONSIDERED. IT WAS DECIDED THAT IT WOULD BE MORE EFFECTIVE TO SELECT ACCORDING TO RISK FACTORS. SINCE MANY CASES OF INVASIVE CANCER WERE FOUND IN THE LOW RISK GROUPS, HIGH RISK FACTORS WERE
Determined from anamnestic data on symptoms and from previous cytologic 
AL diagnosis. It is suggested that selective screening not based on age 
has a limited application and should be restricted mainly to the inter 
val between organized screenings, which in Finlandis five years.

Selective Screening: Theory and Practice Based on High-Risk Group of 
Cervical Cancer. PP. 4, Refs. 10. 

Language: ENGLISH

Authors: 01) Hakama M 03) Saastamoinen P
02) Pukkala E

Subjects: 01) Cancer/Epidemiology
02) Cervix Neoplasms/Diagnosis
03) Cytology
04) Neoplasm Invasiveness

Documents: 01) J Epid Comm Health
02) CRT 457:407-11

Location: FINLAND

If the efficacy of an established program is to be increased, better 
results are likely to be obtained by improving the attendance rate, or 
by changing the time interval between screenings rather than from selec 
tive screening practices. Using data from the organized mass screening 
system in Finland, risk indicators for cervical cancer were identified 
in order to define a high-risk group for selective screening of cervical 
cancer. Single risk factors classified a high-risk group of 8% among 39% 
of the cases. A combination of risk factors by different statistical 
methods was applied. But the results were essentially the same. In order 
to find a high-risk group small enough to yield a reduction in cost, the 
number of cases originating from the low-risk group were increased. The 
diagnostic calculations showed that for selective screening to be effective 
the risk of disease in the high-risk group relative to the low-risk 
group must be greater than that implied by current knowledge of cervical 
cancer epidemiology.

The Impact of Cytological Screening on the Incidence of Invasive 
Cervical Cancer. PP. 3, Refs. 15. 

Language: ENGLISH

Authors: 01) Helm G 03) Lindberg LG
02) Johnson JE

Subjects: 01) Cervix Neoplasms/Occurrence
02) Cytology
03) Neoplasm Invasiveness

Documents: 01) Acta Obstet Gyneol Scan
02) CRT 457:412-14

Location: SWEDEN

A cytological screening program for the early detection and prevention 
of cervical cancer was started in Malmo, Sweden, in 1967. The inciden 
ce of invasive cervical cancer among women faithfully attending the scre 
ening program was reduced over 10 years to about one quarter of the in 
cidence before initiation of the program. Figures calculated for the 
entire female population, however, did not indicate a significant decrease 
in incidence. Adequate individual follow-up, combined with computerized 
administration programs and population registers seems to be necessary 
whenever the effects of a mass screening program are evaluated or

LANGUAGE: ENGLISH

AUTHOR: 01) MIND CRK

SUBJECTS: 01) CERVIX NEOPLASMS/PREVENTION & CONTROL
02) CYTOLOGICAL TECHNIQUES
03) CYTOLOGY

DOCUMENTS: 01) CURR PROBL CANCER
02) CRT 457:415-26

THE PROSPECTIVE STATISTICAL EVIDENCE FROM POPULATION STUDIES SUPPORTS THE CONTINUED USE OF ROUTINE CERVICAL CYTOLOGIC EXAMINATION AS A PREVENTIVE MEASURE. THIS IS TRUE DESPITE UNCERTAINTIES ABOUT THE RELEVANCE OF CERVICAL EPITHELIAL CHANGES TO CERVICAL CARCINOMA AND THE ACCURACY OF THE METHOD. THE PRESENCE OF A NEGATIVE SMEAR SHOULD NOT BE INTERPRETED AS AN ACCURATE DIAGNOSIS BY EITHER PATIENT OR DOCTOR. THE RESULTS CITED IN THIS ARTICLE FROM DIFFERENT COUNTRIES SUGGEST THAT CERVICAL CYTOLOGIC EXAMINATION AS A SELECTIVE SCREENING PROCEDURE CAN SIGNIFICANTLY REDUCE MORTALITY FROM CARCINOMA OF THE CERVIX. HOWEVER, CYTOLOGICAL SCREENING IS FRUSTRATED BY THE FACT THAT THOSE MOST AT RISK ARE THE LEAST LIKELY TO ATTEND TEST REGULARLY. THUS, THERE WILL ALWAYS BE SOME FEW PATIENTS WITH CERVICAL CANCER.


LANGUAGE: ENGLISH

AUTHOR: 01) HULKA BS

SUBJECTS: 01) CANCER PROGRAMS
02) CANCER/DIAGNOSIS
03) CERVIX NEOPLASMS/DIAGNOSIS
04) CYTOLOGICAL TECHNIQUES
05) CYTOLOGY

DOCUMENTS: 01) AM J PUB HEALTH
02) CRT 457:427-40

LOCATION: US

THE DESIRE TO STIMULATE THOSE WHO MAY NEED HEALTH SERVICES TO SEEK AND ACCEPT THEM IS AN IMPORTANT, EVEN URGENT, PROBLEM. WAYS AND MEANS OF ACHIEVING THIS AIM ARE PRESENTED AND DISCUSSED IN TERMS OF A SCREENING PROGRAM FOR CERVICAL CANCER AMONG MEDICALLY INDIGENT WOMEN. AMONG THE CONCLUSIONS REACHED ARE THE FOLLOWING: 1) SCREENING OF INSTITUTIONALIZED WOMEN FOR CERVICAL CANCER IS PRODUCTIVE AND RELATIVELY EASY; 2) CERVICAL CYTOLOGY SHOULD BE PART OF THE EXAMINATION AT ANY CLINIC WHERE PELVIC EXAMINATIONS ARE ROUTINELY PERFORMED; 3) LETTERS ARE AN EFFECTIVE METHOD OF CONTACTING WOMEN AND ENCOURAGING THEM TO MAKE AN APPOINTMENT FOR A CYTOLOGY EXAMINATION; 4) REFERRAL MECHANISMS WHICH ALLOW WOMEN TO MAKE THEIR OWN APPOINTMENTS RESULT IN A HIGHER PROPORTION OF KEPT CHECK-UPS THAN THOSE MADE FOR THE PATIENT; AND 5) REFERRALS BY PATIENTS TO OTHER WOMEN SHOULD BE ENCOURAGED.

Language: English

Authors: 01) Hulka BS 02) Pace IS

Subjects: 01) Cancer/Prevention & Control 02) Cervix Neoplasms/Diagnosis 03) Cervix Neoplasms/Prevention & Control 04) Physical Examination

Documents: 01) AM J PUB HEALTH 02) CRT 457:441-50

Location: US

Since November 1962, medically indigent women in Allegheny County, Pennsylvania (USA), including the city of Pittsburgh, received pelvic examinations and cervical smears as part of a cancer detection program. Between July 1 and December 31, 1965, 450 patients with negative smears were referred to various medical resources for treatment of pathology found during pelvic examination. The results of these referrals were analyzed to determine what benefits the patients derived from pelvic examination. None of the patients was found to have cancer. The need for pelvic examination as a diagnostic measure for benign disease was established. 18% of the women screened had pathology requiring referral. These might not have been identified otherwise.


Language: English

Authors: 01) Husain DA 02) Butler EB 03) Evans DM 04) McGregor JE 05) Yule R

Subjects: 01) Cervix Neoplasms/Prevention & Control 02) Cytological Techniques 03) Cytology

Documents: 01) J CLIN PATHOL 02) CRT 457:451-60

From surveys conducted by the authors it is concluded that the best and most acceptable quality control methods in cytology testing are those from within the laboratory. Most of these have results which can be reported centrally, where the overall control and codes of practice are high. The results are the most reliable, since sources of error in what ever cause are quickly identified. Processing errors for cervical and vaginal smears are unlikely if the staining schedule is satisfactory. The only danger in the staining of fixed smears is the risk of cross contamination. Frequent change of solution is important. It is essential that slides are not put in the rack with the surfaces on which the smear has been made facing another slide. Loss of material from cervical smears during processing is unusual, but is common with serous fluid, seminal fluid, and urine smears. It is therefore unwise to stain such material in batches with cervical smears. The remedy of an individual staining machine has yet to appear on the market.


Language: English
WHILE WE MUST STRIVE TO ACHIEVE OPTIMAL PERFORMANCE IN THE CLINICAL AND LABORATORY ASPECTS OF CYTOLOGY, IT IS DOUBTFUL THAT THE DEPARTURE FROM THE PRACTICE OF ANNUAL EXAMINATION WILL BENEFIT PATIENTS UNTIL QUALITY ASSURANCE SYSTEMS ARE IN PLACE. THE ACADEMY BELIEVES THAT ANNUAL SCREENING FOR CERVICAL CANCER REPRESENTS THE OPTIMAL APPROACH TO EARLY DIAGNOSIS OF THIS DISEASE. CYTOLOGIC SCREENING FOR UTERINE CANCER HAS BEEN, AND IS, THE MAJOR STIMULUS FOR WOMEN TO HAVE AN ANNUAL GYNECOLOGIC EXAMINATION, INCLUDING BREAST EXAMINATION. THE EDUCATION OF WOMEN IS THE PRINCIPAL REASON WHY UTERINE CANCER IS A PREVENTABLE DISEASE. THE ACADEMY RECOMMENDS THAT A GREAT DEAL OF OBJECTIVE STUDIES BE UNDERTAKEN PRIOR TO ANY CHANGE IN THE MEDICAL CARE OF PATIENTS.

IN THEORY, SELECTIVE SCREENING FOR CANCER IN HIGH RISK GROUPS IS ATTRACTIVE. FOR CANCER OF THE BREAST AND CERVIX UTERI, EVIDENCE IS ACCUMULATING REGARDING THE BENEFICIAL EFFECTS OF LOWERING MORTALITY AND MORTALITY FROM THESE DISEASES. ALTHOUGH A NUMBER OF RISK FACTORS ARE KNOWN FOR BOTH BREAST AND CERVICAL CANCER, SELECTION OF HIGH RISK GROUPS FOR SCREENING HAS BEEN DISAPPOINTING. EXPERIENCE FROM EXISTING MASS SCREENING PROGRAMS SHOWS THAT A LARGE PORTION OF CASES ARE IN LOW RISK INDIVIDUALS. THE ONLY CHARACTERISTIC FOR SELECTING WOMEN TO BE SCREENED IS AGE. IT IS PROPOSED THAT RISK FACTORS BE IDENTIFIED AS PART OF AN INITIAL NON-SELECTIVE SCREENING PROGRAM TO INDIVIDUALIZE FUTURE SCREENINGS. FOR EXAMPLE, BY USING SHORTER INTERVALS BETWEEN SCREENINGS FOR HIGH RISK THAN FOR LOW RISK GROUPS.
A clinic for early detection of cancer of the uterine cervix has been in operation in Iceland since 1964, aimed until recently at the 25-59 age group. More than 85% of women in this age group were screened at least once. Mortality from cancer of the cervix has been increasing in Iceland and has continued to increase during the first few years of operation of the screening clinic. Since 1970, however, there was more than a two-fold reduction in mortality and a similar decrease in incidence of tumors of stages II, III, and IV. Both deaths and advanced tumors are largely confined to women who were never screened. Alternative explanations are considered, but the only tenable explanation for the reduction in mortality is the introduction of a comprehensive screening program.

**EVALUATION OF SMEARS OBTAINED BY CERVICAL SCRAPING AND AN ENDOCERVICAL SWAB IN THE DIAGNOSIS OF NEOPLASTIC DISEASE OF THE UTERINE CERVIX.**


**LANGUAGE:** English

**AUTHORS:**
O1) Johansen P
O2) Arffmann E
O3) Pallesen G

**SUBJECTS:**
O1) Cervix Neoplasms/Diagnosis
O2) Cytology
O3) Hysterectomy

**DOCUMENTS:**
O1) Acta Obstet Gynecol Scan
O2) CRT 457:477-82

A study of the supplementary value of an endocervical swab smear in addition to cervical scraping in the histological diagnosis of cervical neoplasias is presented. The sampling techniques were applied to a population with a high prevalence of neoplastic cervical disease. The endocervical swab smear was a useful adjunct in the detection of mild and moderate dysplasia. A combination of the two sampling methods decreased the false negative rate in the diagnosis of intraepithelial, as well as invasive neoplasia.

**THE CHANGING TRENDS OF UTERINE CANCER AND CYTOLOGY: A STUDY OF MORBIDITY AND MORTALITY TRENDS OVER A TWENTY YEAR PERIOD.**


**LANGUAGE:** English

**AUTHORS:**
O1) Kim K
O2) Rigel RD
O3) Patrick JR
O4) Walters JK
O5) Bennett A
O6) Nordin W

**SUBJECTS:**
O1) Cervix Neoplasms/Mortality
O2) Cytology
O3) Neoplasm Invasiveness

**DOCUMENTS:**
O1) Cancer
O2) CRT 457:483-93

**LOCATION:** US

Data on squamous carcinoma of the cervix from a 20-year study (1955-1974) in metropolitan Toledo, Ohio, (USA), revealed a 66% reduction of the average annual age-adjusted incidence rate and a 61% reduction in the death rate of cervical squamous carcinoma in (1955-1958) and (1971-1974), respectively. The decrease for both morbidity and mortality rates was more pronounced in women 50 years and younger. The trend in Toledo is comparable to that of Louisville, Kentucky (USA). The mass cytologic screening program contributed to a remarkable reduction in morbidity and mortality of cervical squamous carcinoma, but had no beneficial effect on endometrial carcinoma.


**LANGUAGE:** ENGLISH

**AUTHORS:**
- 01) KIRK RS
- 02) BOOM ME

**SUBJECTS:**
- 01) CERVIX NEOPLASMS/DIAGNOSIS
- 02) CYTOLOGY

**DOCUMENTS:**
- 01) ACTA CYTOL
- 02) CRT 457:494-97

**LOCATION:** NETHERLANDS

The efficiency of general practitioners and cytology screening programs in the Netherlands in diagnosing neoplasia by means of cervical cytology was investigated for all age groups of women living in rural or urban areas. The general practitioners were almost twice as successful in detecting cases of cervical neoplasia as were screening programs. No reason could be found for their success. The important role of the general practitioner and his or her ability to encourage high-risk group of women to have early and regular smears was stressed.


**ACTA OBSTETRICA ET GYNECOLOGICA SCANDINAVICA** 67: 5-11, 1977 (SUPPL).

**LANGUAGE:** ENGLISH

**AUTHOR:**
- 01) KJELLGREN O

**SUBJECTS:**
- 01) CANCER/EPIDEMIOLOGY
- 02) CERVIX NEOPLASMS
- 03) CYTOLOGY
- 04) NEOPLASM INVASIVENESS

**DOCUMENTS:**
- 01) ACTA OBSTET GYNECOL SCAN
- 02) CRT 457:498-504

**LOCATION:** SWEDEN

The mass screening program in Sweden for cancer of the uterine cervix, started in 1964, is now almost nation-wide. Approximately a quarter of a million women are screened every year. The attendance varies between 55% and 90%. And cancer of the cervix is decreasing. This is most evident in those counties that with screening programs for about ten years. The stage distribution of cervical cancer has not been changed by the screening program. Mortality from cancer of the cervix is unchanged. There has been a decided increase in the diagnosis of cancer in situ of the cervix. This is a difficult practical problem.

A SIMULATION SYSTEM FOR SCREENING PROCEDURES: COMPUTER SIMULATIONS OF CYTOLOGICAL SCREENING PROGRAMMES. PP. 36. Refs. 2.

**PROBLEMS AND PROGRESS IN MEDICAL CARE, 9TH SERIES. NUFFIELD PROVINCIAL HOSPITAL TRUST SERIES, LONDON, OXFORD PRESS, 1973.

**LANGUAGE:** ENGLISH

**AUTHOR:**
- 01) KNOX EG

**SUBJECTS:**
- 01) CERVIX NEOPLASMS/DIAGNOSIS
- 02) CERVIX NEOPLASMS/MORTALITY
- 03) CERVIX NEOPLASMS/OCCURRENCE
- 04) CYTOLOGICAL TECHNICS
- 05) CYTOLOGY

**DOCUMENT:**
- 01) CRT 457:505-24


LANGUAGE: ENGLISH
AUTHOR: KNOX EG
SUBJECTS: CERVIX NEOPLASMS/MORTALITY, CERVIX NEOPLASMS/OCURRENCE, CYTOLOGY
DOCUMENTS: BR J CANCER, CRT 457:525-33
LOCATION: NETHERLANDS

THIS REPORT PROPOSES A SIMPLE METHOD TO CALCULATE THE BEST AGES FOR CERVICAL CYTOLOGY SCREENING. THE ARGUMENT IS GRAPHIC. THE OUTCOME IS VISUAL AND INTUITIVE. A COMPUTER PROGRAM TO ASSIST IN THE CALCULATIONS WAS CONSTRUCTED. USE OF THE METHOD INDICATES THAT RELATIVELY HIGH RATES OF SCREENING IN WOMEN UNDER 30 YEARS OF AGE IS LIKELY TO BE INEFFECTIVE IN REDUCING MORTALITY. THE METHODS PREDICT THAT, IF WE ASSUME A NEGATIVE ERROR RATE FOR THE TEST OF 0.2, AND A NATURAL HISTORY WITH A MEAN INTERVAL BETWEEN DETECTION AND NO CURE OF ABOUT 6 YEARS, A SERIES OF 10 TESTS BETWEEN THE AGES OF 35 AND 80 IN ENGLAND AND WALES SHOULD PREVENT 0.67 DEATHS PER 1000 TESTS AND ABOUT 77% OF ALL DEATHS FROM CERVICAL CANCER IN WOMEN WHO CONFORM WITH THE RECOMMENDATIONS.


LANGUAGE: ENGLISH
AUTHOR: KNOX EG
SUBJECTS: CERVIX NEOPLASMS/DIAGNOSIS, COST ANALYSIS, CYTOLOGY
DOCUMENTS: TUMORI, CRT 457:534-37

IN LIEU OF A SUCCESSFUL RANDOMIZED TRIAL OF THE EFFECTIVENESS OF CERVICAL CYTOLOGY SCREENING, A SIMULATION APPROACH HAS BEEN USED BY THE AUTHOR IN RELATION TO SCREENING PROCEDURES IN GENERAL. THE MODEL DEVELOPED IS ADAPTABLE TO A RANGE OF SCREENING PROBLEMS. IT HAS BEEN USED TO EXPLORE THE CONSEQUENCES OF POLICY OPTIONS FOR CERVICAL CANCER SCREENING. THE FOLLOWING MEAN POINTS WERE DEMONSTRATED. (1) IF THE NATURAL HISTORY IS PROGRESSIVE, AND THE SENSITIVITY GOOD (E.G., .70% OR MORE) AND IF WOMEN ATTENDED WHEN ASKED (E.G., .90% OR MORE) AND A SUBSTANTIAL INVESTMENT MADE (E.G., 10 TESTS PER WOMEN PER LIFETIME), IT SHOULD BE POSSIBLE IN THE UNITED KINGDOM TO REDUCE CURRENT MORTALITY FROM CERVICAL CANCER TO ABOUT
ONE-FIFTH OF ITS PRESENT LEVEL. (2) IF, BY CONTRAST, THE NATURAL HISTORY
IS DYNAMIC, THE RESULTS WILL BE LESS DRAMATIC AND THE SAME INVESTMENT
WOULD REDUCE MORTALITY BY ABOUT ONE-HALF. (3) ALTERNATIVELY, IF THE
TEST IS ONLY MODERATELY ACCEPTABLE WITH AN ATTENDANCE OF 70% IN YOUNGER
WOMEN AND 30% IN OLDER WOMEN WITH PROGRESSIVE NATURAL HISTORY) MOR
TALITY COULD LIKewise BE REDUCED BY ABOUT ONE HALF.

0050651 - UTERINE CERVICAL CARCINOMA IN CONNECTICUT. 1935-1973: EVIDENCE FOR TWO
CLASSES OF INVASIVE DISEASE. PP. 6, REF. 7.

LANGUAGE: ENGLISH
AUTHORS: 01) LASKEY PW
02) FLANNERY UT
03) MEIGS JW

SUBJECTS: 01) CERVIX NEOPLASMS/DIAGNOSIS
02) CERVIX NEOPLASMS/MORTALITY
03) CERVIX NEOPLASMS/OCURRENCE
04) CYTOLOGY
05) NEOPLASM INVASIVENESS

DOCUMENTS: 01) J NATL CANCER INST 45:7538-44
02) CRT 457:538-44

LOCATION: US-CONNECTICUT

FROM 1935 TO 1973 THE CONNECTICUT (USA) TUMOR REGISTRY RECORDED 5,781
WOMEN WITH CARCINOMA IN SITU (CIS) AND 7,614 WITH INVASIVE CERVICAL
CANCER. TRUE INCIDENCE RATES FOR INVASIVE DISEASE WERE CALCULATED. CIS
RATES INDICATED NEWLY DIAGNOSED CASES, BUT TRUE CIS INCIDENCE IS UNKNOWN.
IN 1948-1949, THE INCIDENCE OF INVASIVE CERVICAL CANCER DECLINED ABOUT
20% BEFORE SCREENING COULD HAVE INFLUENCED THE DISEASE TO THAT EXTENT.
CONTINUED DECLINE IN INVASIVE DISEASE RATES AFTER 1955 WERE PROBABLY
ATTRIBUTABLE LARGELY TO SCREENING. THE PERSISTENT OCCURRENCE OF INVASIVE
DISEASE IN SCREENED POPULATIONS AND THE RAPID PROGRESSION OF CANCER,
WITH EARLY DEATH AMONG SOME WOMEN WITH APPARENTLY LOCALIZED DISEASE AT
DIAGNOSIS, SUGGESTED THAT A SECOND CLASS OF INVASIVE CERVICAL CANCER MAY
EXIST. CANCERS IN THIS CLASS MAY DEVELOP AND PROGRESS RAPIDLY WITHOUT A
PRACTICAL POSSIBILITY OF DETECTION BY CYTLOGIC METHODS IN THE PREMA
LIGNANT STAGE. OTHER SCREENING, FOR EXAMPLE, METABOLIC, HORMONAL, IMMUNO
LOGIC, OR Virologic, MAY BE REQUIRED TO CONTROL THIS SECOND CLASS OF CER
VICAL CANCER THAT DEVELOPS SO RAPIDLY.

0050652 - REGIONAL TRENDS IN INCIDENCE OF CERVICAL CANCER IN DENMARK IN RELATION
TO LOCAL SMEAR-TAKING ACTIVITY. PP. 8, REF. 19.

LANGUAGE: ENGLISH
AUTHOR: 01) LYNGE E

SUBJECTS: 01) CANCER REGISTER
02) CERVIX NEOPLASMS/OCURRENCE
03) CYTOLOGY

DOCUMENTS: 01) INT J EPI D 45:457-54
02) CRT 457:545-54

LOCATION: DENMARK

IN THIS STUDY THE REGIONAL TRENDS IN THE INCIDENCE OF CERVICAL CANCER IN
DENMARK FROM 1943 TO 1977 ARE BASED ON AVAILABLE DATA ON THE TOTAL
SMEAR-TAKING ACTIVITY IN THE REGIONS. IN 1980, 40% OF WOMEN IN DENMARK
PARTICIPATED IN ORGANIZED SCREENING PROGRAMS. THE ENTIRE NUMBER OF SMEARS
TAKEN IN THE COUNTRY WAS SUFFICIENT TO COVER THE ENTIRE FEMALE POPU
LATION BY AN ORGANIZED PROGRAM. THE STUDY SHOWS A CONSIDERABLE DECLINE

IMPROVED PROGNOSIS OF CERVICAL CANCER DUE TO COMPREHENSIVE SCREENING.


LANGUAGE: ENGLISH

AUTHORS: 01) MACGREGOR JE  O2) ERASER ME

SUBJECTS: 01) CERVIX NEOPLASMS/DIAGNOSIS  O2) CYTOLOGY

DOCUMENTS: 01) LANCET  O2) CRT 457:556-57


MORTALITY FROM CARCINOMA OF CERVIX UTERI IN BRITAIN.


LANGUAGE: ENGLISH

AUTHORS: 01) MCGREGOR JE  O2) TEPER S

SUBJECTS: 01) CERVIX NEOPLASMS/MORTALITY  O2) CYTOLOGY

DOCUMENTS: 01) LANCET  O2) CRT 457:558-60

LOCATION: ENGLAND

A REVIEW OF AGE-SPECIFIC MORTALITY RATES FROM CERVICAL CANCER IN ENGLAND WALES AND SCOTLAND IN 1968-76 SHOWS A DECLINE IN SOME AGES. IN ENGLAND AND WALES THERE WAS AN INCREASE AT AGES 25-34 AND, POSSIBLY, AT AGES 15-24. SIGNS AN INCREASE IN SCOTLAND FOR THE AGE GROUP 25-34, SEEM EVIDENT WHEN THE FIGURES FOR TWO REGIONS WITH WELL-ESTABLISHED SCREENING PROGRAMS ARE REMOVED. TRENDS IN THESE REGIONS COMPARED WITH THOSE FOR THE REST OF SCOTLAND SUPPORT THE BENEFIT OF CERVICAL SCREENING.

CERVICAL CANCER: USE OF A NON-PHYSICIAN HEALTH TEAM FOR SCREENING PROCEDURES.


AUTHOR: 01) MARTIN PL
PRELIMINARY CLINICAL TRAILS OF AUTOMATED CYTOLOGY SCREENING INSTRUMENTS INDICATE SPECIMEN FALSE NEGATIVE ERROR RATES COMPARABLE TO THE FALSE RATES REPORTED IN THE LITERATURE FOR CONVENTIONAL MANUAL CYTOLOGY SCREENING, AND SPECIMEN FALSE POSITIVE RATES THAT WOULD PROBABLY BE ADEQUATE FOR AUTOMATED PRESCREENING DEVICES. HOWEVER, THE FULL IMPLICATIONS OF THESE RESULTS TO THE DEVELOPMENT OF PRACTICAL AUTOMATION FOR CERVICAL CANCER SCREENING REMAIN UNCLEAR. EFFORTS WILL CONTINUE TOWARDS DEVELOPMENT OF MORE SENSITIVE AND SPECIFIC MARKERS OF EARLY PREMALIGNANT CELLMULAR CHANGE. DEVELOPMENT OF MORE EFFECTIVE STRATEGIES FOR AUTOMATED SPECIMEN CLASSIFICATION.

0050660 - DETECTION OF CERVICAL AND BREAST CANCER: A COMMUNITY-BASED PILOT STUDY. PP. 9, REFs. 20.
LANGUAGE: ENGLISH
AUTHORS: 01) MISCZYNSKY M 02) STERN E
SUBJECTS: 01) CERVIX NEOPLASMS/DIAGNOSIS 02) CERVIX NEOPLASMS/PREVENTION & CONTROL 03) CYTOLOGY
DOCUMENTS: 01) MED CARE 02) CRT 457:607-16
LOCATION: US-LOS ANGELES
PILOT SCREENING CLINICS WERE CONDUCTED IN TWO HEALTH DISTRICTS OF LOS ANGELES COUNTIES WHERE CERVICAL CANCER INCIDENCE AND MORTALITY RATES WERE HIGH. RESULTS ARE OF INTEREST BECAUSE THEY PROVIDE INFORMATION ON PLANNING AND OPERATING COMMUNITY BASED CLINICS IN LOW-INCOME AREAS WHERE WOMEN ARE UNLIKELY TO SEEK OR INELIGIBLE FOR AVAILABLE HEALTH SERVICES. SOME OF THE FACTORS THAT CONTRIBUTED TO THE PARTICIPATION WERE: CONVENIENCE OF THE CLINIC LOCATION, CONVENIENCE OF HOURS, COMPREHENSIVE NATURE OF THE HEALTH EXAMINATION (BREAST EXAMINATIONS AS WELL AS PAP TEST), WOMEN NURSES CONDUCTING THE EXAMINATIONS, ADEQUATE TRANSPORTATION TO THE CLINIC, AND BABYSITTING FACILITIES.

0050661 - FALSE-NEGATIVE CYTOLOGY RATES IN PATIENTS IN WHOM INVASIVE CERVICAL CANCER SUBSEQUENTLY DEVELOPED. PP. 5, REFs. 23.
LANGUAGE: ENGLISH
AUTHORS: 01) MORELL ND 02) TAYLOR JR 03) SNYDER RN 04) ZIEL HK 05) SALTZ A 06) WILLIE S
SUBJECTS: 01) CERVIX NEOPLASMS/DIAGNOSIS 02) CYTOLOGY 03) NEOPLASM INVASIVENESS
DOCUMENTS: 01) OBSTET GYNECOL 02) CRT 457:617-21
LOCATION: US
THE THREE-YEAR SCREENING INTERVAL RECOMMENDED BY THE AMERICAN CANCER SOCIETY WOULD APPARENTLY DECREASE THE DETECTION OF PREMALIGNANT AND MALIGNANT DISEASE. THE AUTHORS REPORT THAT 20% OF THE STUDY PATIENTS DEVELOPING INVASIVE CANCER HAD HAD AT LEAST TWO NEGATIVE PAP SMEARS WITHIN THREE OF THE DIAGNOSIS OF CANCER. HOWEVER, THE MAJORITY OF FALSE-NEGATIVE RESULTS IN THE SERIES COULD BE ATTRIBUTED TO SAMPLE ERROR. THE AUTHORS RECOMMEND YEARLY, OR AT LEAST BIENNIAL, CERVICAL CYTOLOGIC SCREENING.

LANGUAGE: ENGLISH
AUTHOR: O1) MORGAN PP
SUBJECTS: O1) CANCER PROGRAMS
O2) CERVIX NEOPLASMS
O3) CYTOLOGY
DOCUMENTS: O1) CAN MED ASSOC J
O2) CRT 457:622-29

LOCATION: CANADA

SCREENING PROGRAMS USING PAPANICOLAU SMEARS HAVE NOT COMPLETELY FULFILLED THEIR POTENTIAL. THREE MAJOR CHALLENGES REMAIN: (1) DELIVERY OF THE PROGRAMS TO A GREATER PROPORTION OF WOMEN AT RISK; THAT IS, SCREENING PROGRAMS FOR CANCER OF THE CERVIX EVEN IN AREAS WHERE 80% OF CHILD BEARING WOMEN PARTICIPATE ARE NOT REACHING ENOUGH WOMEN AT HIGH RISK (THOSE OF LOWER SOCIOECONOMIC STATUS WHO HAVE HAD MULTIPLE SEXUAL PARTNERS); (2) IMPROVEMENT OF TECHNOLOGY: STANDARDIZATION OF LABORATORY TECHNIQUES AND IMPROVING RELIABILITY OF CYTOLOGIC DIAGNOSIS IN THE FIELD AS COMPARED TO A REFERENCE LABORATORY; AND (3) THE IMPROVEMENT OF EVALUATION SO THAT OTHER CRITERIA BESIDES REGIONAL DIFFERENCES IN MORTALITY AS IT RELATES TO PARTICIPATION IN SCREENING PROGRAMS IS EXAMINED. THESE CRITERIA INCLUDE SEXUAL PRACTICES AND PERSONAL HYGIENE AS THESE MAY CONFUSE THE EFFECTS OF POPULATION-BASED SCREENING AND EVALUATION.

IS SCREENING FOR CERVICAL CANCER WORTHWHILE? PP. 7. REFS. 57.

LANGUAGE: ENGLISH
AUTHOR: O1) MURPHY JF
SUBJECTS: O1) CERVIX NEOPLASMS/DIAGNOSIS
O2) CYTOLOGY
O3) NEOPLASM INVASIVENESS
DOCUMENTS: O1) IRISH J MED SCI
O2) CRT 457:624-31

THERE ARE COUNTLESS IMPERFECTIONS IN TAKING SMEARS, IN INTERPRETING THEM IN BIOPSIES AND HISTOLOGICAL OPINIONS, IN ALL THE MODALITIES OF TREATMENT, AND PARTICULARLY IN THE BEHAVIOR OF AN INDIVIDUAL CANCER IN AN INDIVIDUAL PATIENT. WHAT EMERGES, HOWEVER, FROM THE NOW ALMOST COUNTLESS PUBLICATIONS ON THIS SUBJECT IS THAT MASS SCREENING FOR CERVICAL CANCER IS A WORTHWHILE EXPERIENCE. THIS IS BECAUSE THE PAP SMEAR CAN IDENTIFY WOMEN WHO ARE AT GREATER THAN AVERAGE RISK OF DEVELOPING CERVICAL CANCER BY DETECTING ASYMPTOMATIC LESIONS THAT IF LEFT UNTREATED WOULD PROGRESS TO CANCER IN A CONSIDERABLE PROPORTION OF CASES. ALSO, AS JUDGED FROM COUNTRIES THAT USE CYTOLOGY, THERAPY OF ASYMPTOMATIC LESIONS RESULT IN A LOWERED INCIDENCE AND MORTALITY OF INVASIVE CANCER.


LANGUAGE: ENGLISH
AUTHOR: O1) CAN DNHW
SUBJECTS: 01) CANCER PROGRAMS
02) CANCER/EPIEDEMILOGY
03) CERVIX NEOPLASMS/MORTALITY
04) CERVIX NEOPLASMS/OCURRENCE
05) CYTOLOGY
06) NEOPLASM INVASIVENESS

DOCUMENTS: 01) CAN MED ASS J
02) CRT 457:632-61

LOCATION: CANADA

In 1973, a task force, headed by R.J. Walton, was established to produce a "state of the art" report on cervical cancer. This report presents in formation on epidemiology and natural history of carcinoma of the cervix the theory, practice, and outcome of cervical screening in Canada: the relationship between screening programs for carcinoma of the cervix and other screening and preventive programs in Canada: and recommendations. One of the most important and controversial recommendations of the Walton report concerned the frequency of cytology examinations. Initial smears should be obtained from all women over the age of 18 who have had sexual intercourse. If the initial smear is without significant atypia, a second smear should be taken within one year. Provided the initial two smears and all subsequent smears are satisfactory and without significant atypia, further smears should be taken at approximately 3-year intervals until age 35, and thereafter at 5-year intervals until age 60.

0050685 - CERVICAL CANCER SCREENING PROGRAMS: SUMMARY OF THE 1982 CANADIAN TASK FORCE REPORT. PP. 9, REFS. 34.

LANGUAGE: ENGLISH

AUTHOR: 01) CAN DNHW

SUBJECTS: 01) CANCER PROGRAMS
02) CANCER/EPIEDEMILOGY
03) CERVIX NEOPLASMS/DIAGNOSIS
04) CERVIX NEOPLASMS/MORTALITY
05) CYTOLOGY

DOCUMENTS: 01) CAN MED ASSOC J
02) CRT 457:662-70

LOCATION: CANADA

The task force was reconvened by the Department of National Health and Welfare in 1980 in response to concerns expressed about the significance of new data, changing socioeconomic patterns, and wide variations in the implementation of the 1976 recommendations. This article is a summary of the 1982 task force report. In addition to updates of the 1976 material, new sections appear on groups at risk, mathematical models of screening, quality control in screening programs, cytologic screening coverage of the Canadian population, and management of patients with abnormal smears. The greatest change in the recommendations of the Walton report concerns the frequency with which screening should be repeated. In sexually active women ages 18-35, the task force recommends annual screening. It also stressed that the recommended screening frequencies apply only to women whose smears show no epithelial cell atypia. Once such changes are detected, schedules for repeat examinations should be dictated by the requirements for surveillance, diagnosis, treatment, and follow-up.

0050686 - CERVICAL CANCER SCREENING: THE PAP SMEAR- SUMMARY OF AN NIH CONSENSUS STATEMENT. PP. 3, REFS. 2.

LANGUAGE: ENGLISH
A consensus development conference on cervical cancer screening was held at the National Institutes of Health on 22-25 July 1980. Its purpose was to examine the scientific basis for screening for cervical cancer and to make recommendations for the medical community and the public on the use of the PAP smear in screening for cancer of the uterine cervix. The following conclusions were put forth: (1) There is an association between increased screening for cervical cancer and a drop in cervical cancer mortality and morbidity; (2) The PAP smear is beneficial. It should be used as a routine screening procedure for cervical cancer; (3) All women who are sexually active should be screened and after two negative smears one year apart should continue to be screened at intervals from 1 to 3 years; (4) Intensive follow-up is recommended for women with abnormal smears.
MASS SCREENING FOR CANCER OF THE UTERINE CERVIX IN OSTFOLD COUNTY, NORWAY: AN EXPERIMENT, SECOND REPORT OF THE NORWEGIAN CANCER SOCIETY. PP. 3, REF. 1.


LANGUAGE: ENGLISH

AUTHORS: 01) PEDERSON E
02) HOEG K
03) KOLDSTAD P

SUBJECTS: 01) CERVIX NEOPLASMS
02) CYTOLOGY

DOCUMENTS: 01) ACTA OBSTETR GYNECOL SCAN
02) CRT 457: 693-99

LOCATION: NORWAY


POPULATION SCREENING FOR CERVICAL CANCER IN JAMAICA: RESULTS OF TWO SEPARATE SURVEYS. PP. 7, REF. 15.


LANGUAGE: ENGLISH

AUTHOR: 01) PERSAUD V

SUBJECTS: 01) CERVIX NEOPLASMS/DIAGNOSIS
02) CERVIX NEOPLASMS/PREVENTION & CONTROL
03) CYTOLOGY

DOCUMENTS: 01) WEST INDIAN MED J
02) CRT 457: 693-702

LOCATION: JAMAICA

CERVICAL CYTOLOGY WAS CARRIED OUT IN 652 WELL WOMEN RESIDING IN THE LOW INCOME JAMAICAN COMMUNITIES OF HERMITAGE AND AUGUST TOWN. A SURPRISINGLY HIGH PERCENTAGE OF WOMEN PARTICIPATED IN THE PROGRAM (63%). THE PREVA
ENCE OF THE PRE-CLINICAL CARCINOMA (18 PER 1000) WAS MUCH HIGHER THAN IN NORTH AMERICA AND EUROPE. BUT SIMILAR TO THE CAYMAN ISLAND AND BARBADOS. CYTOLOGY SCREENING OF JAMAICAN FAMILY PLANNING WOMEN DISCLOSED A PREVALENCE RATE WHICH WAS ONE-THIRD THE RATE IN THE POPULATION OF HER MIGRATION AND AUGUSTOWN. THE DISCREPANCY APPEARS TO BE RELATED TO DIFFERENCES IN SOCIO- ECONOMIC FACTORS BETWEEN THE TWO GROUPS. THIS STUDY SUGGESTS THAT EFFECTIVE CONTROL OF CLINICAL CARCINOMA OF THE CERVIX IN JAMAICA MAY BE BEST ACHIEVED BY DEFINING AND SCREENING OTHER HIGH-RISK AREAS WITHIN THE GENERAL POPULATION.


EXPLOITATE CYTOLOGY IS A HIGHLY SENSITIVE AND INEXPENSIVE SCREENING TECHNIQUE FOR CERVICAL CANCER AND ITS PRECURSORS. THE DETECTION AND ERADICATION OF THE PRECURSORS HAVE LED TO A SIGNIFICANT DECREASE IN CERVICAL CANCER INCIDENCE RATES AND DEATH RATES IN AREAS WITH WIDESPREAD AND PROLONGED USE OF EXPLOITATE CYTOLOGY. RECENTLY, HOWEVER, THE UTILITY AND COST-EFFECTIVENESS OF CYTOLOGY HAVE BEEN QUESTIONED, AND IT HAS BEEN SUGGESTED THAT SCREENING STRATEGIES BE ALTERED. A CONSIDERATION OF THE EFFECT OF THE TRANSIT TIMES OF CERVICAL INTRAEPITHELIAL NEOPLASIA ON SCREENING INTERVALS AND THE IMPACT OF CHANGING PATTERNS OF CERVIX CANCER EPIDEMIOLOGY ON SCREENING STRATEGY SUGGESTS THAT A SIGNIFICANT DECREASE IN SCREENING INTERVALS MAY BE COUNTER PRODUCTIVE.
0050673 - CERVICAL CANCER IN WOMEN BELONGING TO A CYTOLOGICALLY SCREENED POPULATION. PP. 8, REFS. 14.

LANGUAGE: ENGLISH

AUTHOR: O1) RYLANDER E

SUBJECTS: O1) CERVIX NEOPLASMS/DIAGNOSIS
O2) CYTOLOGY
O3) NEOPLASM INVASIVENESS

DOCUMENTS: O1) ACTA OBSTET GYNECOL SCAND
O2) CRT 457:721-26

LOCATION: SWEDEN

WOMEN BELONGING TO THE CYTOLOGICALLY SCREENED POPULATION IN STOCKHOLM, SWEDEN IN 1968-1974 AND WHO DEVELOPED CERVICAL CANCER STAGE I TO IV WERE STUDIED. THE PURPOSE WAS TO FIND THE NUMBER OF WOMEN IN WHOM CANCER OR ITS PRECLINICAL STAGE WAS NOT DETECTED IN ROUTINE SCREENING, AND THE REASONS FOR THIS OCCURRENCE. IT WAS FOUND THAT 34 OF 177 WOMEN IDENTIFIED HAD NEVER BEEN CYTOLOGICALLY SCREENED. THE REMAINING 143 WOMEN HAD BEEN CHECKED BY MASS SCREENING AND/OR BY PRIVATE SPECIALISTS OR IN HOSPITALS. IN 51 SCREENED WOMEN, CANCER WAS NOT DETECTED UNTIL THE WOMEN THEMSELVES CONSULTED A DOCTOR BECAUSE OF SYMPTOMS. IN 85 WOMEN, OR 48% OF THE GROUP, THE CANCER ESCAPED DETECTION AT AN ASYMPTOMATIC STAGE. ERRORS CAUSING A DELAY OR INTERRUPTION OF THE FOLLOW-UP OF THE PATIENTS WITH SUSPICIOUS SMEARS OR COLPOSCOPIC ATYPIA WERE OBSERVED IN 25 CASES. SIXTY FOUR PATIENTS, OR 48% OF ALL SCREENED WOMEN, HAD AT LEAST ONE NEGATIVE SMEAR WITHIN 4.5 YEARS PRIOR TO DISCOVERY OF THE MALIGNANCY. OF THESE, 53 HAD A NEGATIVE SMEAR WITHIN THREE YEARS.

0050674 - SCREENING FOR CERVICAL CANCER: RESULTS FROM SEVERAL INTERVENTION STRATEGIES. PP. 9, REFS. 5.

LANGUAGE: ENGLISH

AUTHORS: O1) SATARIANO WA
O2) SCHWARTZ AG
O3) SWANSON GM

SUBJECTS: O1) CERVIX NEOPLASMS/DIAGNOSIS
O2) CERVIX NEOPLASMS/OCURRENCE
O3) CYTOLOGY
O4) NEOPLASM INVASIVENESS

DOCUMENTS: O1) PROG CLIN BIOL RES
O2) CRT 457:727-35

LOCATION: US

CERVICAL CANCER


LANGUAGE: ENGLISH
AUTHORS: 01) SCHNEIDER J 02) TWIGGS LB
SUBJECTS: 01) CERVIX NEOPLASMS/DIAGNOSIS 02) COST ANALYSIS 03) CYTOLOGY 04) NEOPLASM INVASIVENESS
DOCUMENTS: 01) OBSTET GYNECOL 02) CRT 457:736-44
LOCATION: US

COST OF CYTOLOGY SCREENING FOR CARCINOMA OF THE CERVIX IS ANALYZED AND THE EXPENSES OF MEDICAL CARE COMPARED IN THREE THEORETIC POPULATIONS: A) UNSCREENED, B) SCREENED FOR THE FIRST TIME, AND C) AN IDEAL POPULATION SCREENED REPEATEDLY IN THE PAST. COST ESTIMATES INCLUDE DIAGNOSTIC AND THERAPEUTIC MANAGEMENT OF PATIENTS WITH POSITIVE REPORTS AND TAKE INTO ACCOUNT THE NATURAL HISTORY OF THE DISEASE. IT IS SUGGESTED THAT ONCE ALL PREVALENT DISEASE HAS BEEN IDENTIFIED AND TREATED, A REDUCED SCHEDULE IN WHICH PATIENTS ARE SCREENED EVERY THIRD YEAR IS MEDICALLY ACCEPTABLE.


LANGUAGE: ENGLISH
AUTHOR: 01) SCHWEITZER SD
SUBJECTS: 01) CERVIX NEOPLASMS/DIAGNOSIS 02) COST ANALYSIS 03) CYTOLOGY
DOCUMENTS: 01) HEALTH SERV RES 02) CRT 457:745-55
LOCATION: US

A METHODOLOGICAL FRAMEWORK FOR COST-EFFECTIVENESS EVALUATION OF DIAGNOSTIC TEST FOR MASS SCREENING IS PRESENTED. THE DECISION RULE IS BASED ON DISEASE INCIDENCE, PROBABILITIES OF TEST ERROR, THE COST OF THE TEST AND OF TREATMENT FOR FOUND CASES, AND THE ECONOMIC VALUE (EXPECTED LIFETIME EARNINGS OR EQUIVALENT) OF ADDITIONAL LENGTH OR QUALITY OF LIFE FOR THOSE CURED OF DISEASE. THE DECISION RULE IS APPLIED TO THE PAP TEST FOR CERVICAL CANCER, WITH RESULTS SHOWING THAT AS A ONE-TIME SCREENING DEVICE THE TEST IS COST-EFFECTIVE FROM SOCIETY'S STANDPOINT.


LANGUAGE: ENGLISH
AUTHOR: 01) SPRIGGS AI
SUBJECTS: 01) CERVIX NEOPLASMS/DIAGNOSIS 02) CERVIX NEOPLASMS/MORTALITY 03) CYTOLOGY 04) NEOPLASM INVASIVENESS
DOCUMENTS: 01) NATURE 02) CRT 457:756-58
LOCATION: ENGLAND
THE OBJECT OF CERVICAL SMEAR SCREENING IS TO PREVENT DEATHS FROM CARCINOMA OF THE CERVIX. THE TEST OF EFFICACY IS TO DISCOVER WHETHER DEATHS ARE BEING PREVENTED. THIS PAPER PRESENTS AN ASSESSMENT OF THE PRACTICE OF TESTING FOR CANCER OF THE CERVIX BY MEANS OF CERVICAL SMEARS. IN GENERAL, THE REASONS FOR EXPECTING A PREVENTIVE EFFECT FROM CERVICAL SCREENING ARE SO STRONG THAT THERE SEEMS LITTLE CHOICE BUT TO PRESS ON AND BRING THE TEST, IF POSSIBLE, TO THOSE AT MAXIMUM RISK - OLDER WOMEN IN THE LOWEST SOCIAL CLASSES - IN WHOM THE BARRIER OF FEAR AND MISCONCEPTION STILL REMAINS TO BE BROKEN DOWN.


LANGUAGE: ENGLISH

AUTHORS: 01) SPRIGGS AI 02) HUSAIN QA

SUBJECTS: 01) CERVIX NEOPLASMS/DIAGNOSIS 02) CERVIX NEOPLASMS/MORTALITY 03) CYTOLOGY 04) NEOPLASM INVASIVENESS

DOCUMENTS: 01) B MED J 02) CRT 457:759-61

LOCATION: ENGLAND

THIS PAPER WAS PREPARED BY THE BRITISH SOCIETY FOR CLINICAL CYTOLOGY WHICH, FROM TIME TO TIME, PROVIDES STATEMENTS OF ITS POLICY. WIDE DIFFERENCES OF OPINION EXIST ABOUT THIS MATTER. THE PRESENT RECOMMENDATIONS ARE NOT THE RESULT OF A CONSENSUS OR RECONCILIATION OF DIFFERENT VIEWS. A SUMMARY OF RECOMMENDATIONS INCLUDES: AGE AT FIRST SCREENING SHOULD BE 25 FOR WOMEN PRESENTING FOR CONTRACEPTION, PREGNANCY, OR VENEREAL DISEASE AND AGE 30 IF SEXUALLY ACTIVE AND NOT ALREADY TESTED; 3-5 YEARLY INTERVALS FOR SCREENING; AND A FIRST SMEAR IN WOMEN OVER 25 FOLLOWED BY A SECOND SMEAR WITHIN A YEAR TO GUARD AGAINST FALSE-NEGATIVE ERROR.


LANGUAGE: ENGLISH

AUTHORS: 01) STARREVELO AA 03) BROWN LB 02) HILL GB 04) KDCH M

SUBJECTS: 01) CERVIX NEOPLASMS/DIAGNOSIS 02) CERVIX NEOPLASMS/OCCURRENCE 03) CYTOLOGY 04) NEOPLASM INVASIVENESS

DOCUMENTS: 01) CAN MED ASSOC J 02) CRT 457:762-66

LOCATION: CANADA-ALBERTA

THE RATES OF REGISTRATION OF CASES IN SITU AND INVASIVE CANCER OF THE CERVIX IN ALBERTA, CANADA, HAVE DECREASED FOR WOMEN AGED 25 AND OLDER SINCE THE INTRODUCTION OF SCREENING IN THE EARLY 1960s AS PREDICTED BY THEORY AND DESCRIBED IN FINLAND. HOWEVER, FOR WOMEN AGED 15 TO 34 YEARS THE PREDICTED PATTERN WAS FOLLOWED ONLY INITIALLY: THE REGISTRATION RATE FOR IN SITU AND PROBABLY ALSO INVASIVE CANCER INCREASED AFTER 1973. THIS COULD BE DUE TO AN ACTUAL INCREASE IN THE INCIDENCE OF IN SITU CANCER OF THE CERVIX AMONG YOUNGER WOMEN, AS MIGHT BE EXPECTED FROM THE EPIDEMIOLOGIC ASPECTS OF THE DISEASE, BUT IT MIGHT ALSO BE DUE TO INCREASED RECRUITMENT OF YOUNGER WOMEN IN THE SCREENING PROGRAM.
CERVICAL CANCER

OF THE TOTAL FEMALE POPULATION OF THREE SWEDISH COUNTIES MORE THAN 90% BETWEEN THE AGES OF 30 AND 59 YEARS, 52% BETWEEN 60 AND 69 YEARS, AND 25% OLDER THAN 70 YEARS WERE SCREENED FOR CERVICAL CANCER WITH THE PAP SMEAR OVER A TEN-YEAR PERIOD. THE UNIQUENESS OF THE STUDY IS THAT IN SWEDEN IT IS POSSIBLE TO FOLLOW UP THE ENTIRE POPULATION DURING THEIR LIFETIME VIA A POPULATION REGISTER, WHICH HAS ITS ROOTS IN THE 17TH CENTURY. NATURAL TO SWEDES BUT ALMOST INCOMPREHENSIBLE IN THE UNITED STATES OR THE UNITED KINGDOM. EVERY PAP SMEAR TAKEN WAS COMPUTER RECORDED AND LINKED ON AN INDIVIDUAL LEVEL TO THE CANCER REGISTRY. THERE WERE 207,455 WOMEN FOLLOWED UP FOR 10 YEARS. NO WOMEN WERE LOST TO FOLLOW UP. THERE WAS A 75% DECREASE IN INVASIVE CERVICAL CANCER AMONG WOMEN WHO HAD SMEARS TAKEN AT LEAST ONCE DURING THE 10-YEAR PERIOD. AMONG WOMEN WHO HAD NEVER HAD SMEARS, THE INCIDENCE OF INVASIVE CERVICAL CANCER WAS FOUR TIMES GREATER THAN AMONG WOMEN WHO HAD BEEN EXAMINED AT LEAST ONCE.

EVALUATION OF THREE CERVICAL CANCER DETECTION PROGRAMS IN JAPAN WITH SPECIAL REFERENCE TO COST-BENEFIT ANALYSIS. PP. 6, REF. 39. CANCER 55(MAY): 2514-19, 1985.

THREE SCREENING PROGRAMS FOR EARLY DETECTION OF CERVICAL CANCER USED IN JAPAN WERE EVALUATED ACCORDING TO THE FOLLOWING CRITERIA: 1) ECONOMIC EFFECTIVENESS; 2) SCREENING EFFICIENCY; AND 3) ACCESS TO MEDICAL CARE. THE MOBILE PROGRAM HAD THE HIGHEST BENEFIT-COST RATIO (BCR, 120) AND WAS MOST COST-EFFECTIVE. ITS DETECTION RATE, RESCREENING RATE AND EARLY CANCER DETECTION RATE (PROPORTION OF STAGE-0 PATIENTS TO ALL PATIENTS WITH CANCER) WERE MODERATELY HIGH (0.09%, 2.07%, AND 55% RESPECTIVELY). THE MOBILE PROGRAM IS WELL-SUITED TO RURAL AREAS, ESPECIALLY WHERE RESIDENTS HAVE A POSITIVE ATTITUDE TOWARD LOCAL HEALTH SERVICES. THE DETECTION CENTER PROGRAM WAS LESS COST-EFFECTIVE THAN THE MOBILE PROGRAM (BCR, 0.83) BUT DIAGNOSTICALLY THE MOST EFFECTIVE WITH THE HIGHEST DETECTION, RESCREENING, AND EARLY CANCER DETECTION RATE (0.15%, 5.08% AND 61% RESPECTIVELY). IT IS SUITABLE TO LARGE CITIES WITH POPULATIONS OVER ONE MILLION WITH EFFICIENT PUBLIC TRANSPORTATION. THE PRIVATE PHYSICIAN PROGRAM WAS LEAST EFFECTIVE OF THE THREE PROGRAMS IN TERMS OF ECONOMICS AND SCREENING EFFICIENCY.

Language: English

Authors: 01) Thorn JB 03) Swanson K
02) Russell EM

Subjects: 01) Cervix neoplasms/diagnosis
02) Cost analysis
03) Cytology

Documents: 01) Lancet
02) CRT 457:777-79

Location: Scotland

In 1971 the Aberdeen cytology service handled 22,291 cervical smears-3/4 from women participating in a screening program and the rest from women with symptoms who were referred to the hospital. As a result of the screening, 56 preclinical cases of cancer of the cervix uteri were treated in the hospital; 13 others were classified as less than preclinical. Of the gynecological patients 20 had clinical cancer and 29 had less than preclinical lesions. From estimates of the costs of running the cytology service and of hospital inpatient costs, it is possible to derive figures for detecting and treating preclinical cases and investigating and treating clinical cases. The cost of the health service of detecting and treating each preclinical case was slightly less than that for inpatient treatment of each clinical case. However, if mass screenings were abandoned cytology would almost certainly continue for women referred to the hospital with symptoms, and, if the cost of taking and examining these smears is taken into account, the cost per clinical case treated nearly doubles.


Language: English

Authors: 01) Timonen S 02) Pyorala T

Subjects: 01) Cervix neoplasms/diagnosis
02) Cervix neoplasms/mortality
03) Cervix neoplasms/occurrence
04) Cytology
05) Neoplasm invasiveness

Documents: 01) Acta Obstet Gynecol Scan
02) CRT 457:780-86

Location: Finland

Since mass screenings were started in Finland, the incidence of cervical cancer has dropped by about 50% in the age group 25-60. The decrease was two-thirds. Moreover, there was a similar decrease in mortality in the younger age groups. All risk groups are not covered by the screening program. However, cervical carcinoma is still a sociomedical and clinical problem particularly among older women.


Language: English

Authors: 01) Luce BR 02) US Congress
THE CASE STUDY EXAMINED THE FINANCIAL INCENTIVES OF VARIOUS INTERESTED PARTIES TO FUND CERVICAL CANCER SCREENING. IT TESTS THE COST-EFFECTIVENESS OF SCREENING UNDER VARIOUS CONDITIONS, SUCH AS WHEN COSTS ARE APPORTIONED TO OTHER HEALTH-RELATED ACTIVITIES DURING A GYNECOLOGICAL VISIT; WHEN A "LOW COST" CLINIC EMPLOYS LICENSED PRACTICAL NURSES RATHER THAN PHYSICIANS TO ADMINISTER THE PAP TEST; AND WHEN A HIGH-RISK BUT ISOLATED POPULATION IS SCREENED. SCREENING INTERVALS FROM EVERY YEAR TO ONCE IN TEN YEARS ARE ALSO TESTED. THE RESULTS OF THE ANALYSIS INDICATE THAT A PRIVATE PARTY ALWAYS HAS A FINANCIAL INCENTIVE TO POSTPONE SCREENING, WHEREAS SOCIETY FINDS IT MORE COST EFFECTIVE TO SCREEN THAN TO NOT SCREEN, BUT ONLY AT INFREQUENT INTERVALS. THE COST EFFECTIVENESS OF SCREENING IS MARKEDLY AFFECTED WHEN A MORE EFFICIENT (I.E., LESS COSTLY) DELIVERY MODE IS SIMULATED, AND IT IS SIGNIFICANTLY AFFECTED WHEN JOINT PRODUCTION EFFECTS ARE CONSIDERED. HOWEVER, IT IS NOT VERY SENSITIVE TO SMALL CHANGES IN THE DISCOUNT RATE WHICH INITIALLY WAS SET AT 10%, NOR TO VARYING ASSUMPTIONS REGARDING PAP TEST ERROR RATES.

THE BENEFICIAL EFFECTS OF MASS SCREENING ARE CLEARLY SHOWN IN THE PUBLISHED DATA OF ALL WORKERS IN THE FIELD. THERE IS A REAL NEED TO EXTEND THE SERVICES TO HIGH-RISK GROUPS AND EVERY OPPORTUNITY OF REACHING THEM MUST BE GRASPED. SCREENING FACILITIES SHOULD BE AVAILABLE IN FACTORIES AND ORGANIZATIONS WITH LARGE FEMALE STAFF, IN WOMEN'S PRISONS, AND ESPECIALLY IN ANTENATAL AND POSTNATAL CLINICS, MEDICAL AND SURGICAL HOSPITAL WARD, AND VENEREAL DISEASE CLINICS. THE MAGNITUDE OF THE EFFORT TO MAINTAIN A LARGE-SCALE SCREENING PROGRAM IN TERMS OF COST AND PERSONNEL IS CONSIDERABLE, BUT IF THE OBJECTIVE OF EXTERMINATING A FATAL DISEASE IS WITHIN OUR REACH, IS IT NOT A WORTH-WHILE PROJECT?
PEOPLE LOW ON THE SOCIAL SCALE TEND TO MAKE LEAST USE OF THE HEALTH SERVICES. MANY FACTORS ARE INVOLVED IN THEIR DECISION: LACK OF EDUCATION; LIMITED CONTACT WITH THOSE WHO HAVE HAD RELEVANT HEALTH EXPERIENCE; A STOICISM THAT ACCEPTS LIFE AS UNCOMFORTABLE AND SUPPRESSES ILLNESS FOR AS LONG AS POSSIBLE; AND A WAY OF LIFE THAT IS CONCERNED MORE WITH SURVIVING TODAY THAN WITH PLANNING FOR TOMORROW. ALL THESE BEAR STRONGLY ON PROGRAMS OF SCREENING FOR CERVICAL CYTOLOGY.


THE CONTINUED OCCURRENCE OF ADVANCED CERVICAL CARCINOMA (STAGES II, III, IV) WAS STUDIED. PATIENTS WERE EVALUATED WITH REGARD TO AGE, RACIAL ORIGIN, SOCIOECONOMIC STATUS, GEOGRAPHIC DISTRIBUTION, AND SYMPTOMS. PARTICULAR EMPHASIS WAS PLACED ON THE ROLE OF SCREENING IN DISEASE DETECTION. THE DISTURBING FINDING WAS THAT OF THE 170 PATIENTS REVIEWED, DISEASE WAS DIAGNOSED BY SCREENING EXAMINATION IN ONLY 20. FURTHERMORE, 62 PATIENTS WERE NOT DIAGNOSED EVEN THOUGH THEY WERE EXPOSED TO THE HEALTH CARE SYSTEM. FACTORS INFLUENCING PARTICIPATION IN PAP SMEAR SCREENING PROGRAMS WERE DISCUSSED, WITH SUGGESTIONS AS TO HOW TO ENHANCE USE OF THE PAP SMEAR. THESE FACTORS ARE INCREASING AGE, LOWER SOCIOECONOMIC STATUS, LOWER EDUCATIONAL LEVEL, AND A LONG INTERVAL SINCE PREGNANCY. A NEW AND DIFFERENT MODE TO ATTRACT WOMEN TO PARTICIPATE IN A CYTOLOGY PROGRAM WAS SENDING AN INVITATION WITH THE MONTHLY WELFARE CHECK. THIS RESULTED IN 31% OF THE WOMEN CONTACTED COMING FOR PAP SMEAR TESTING.

QUALITY CONTROL MECHANISM FOR CYTOLOGY PROGRAMS. PP. 8. ACTA CYTOLÓGICA (BALT) 9(8): 407-12, NOV-DEC 1965

FOUR YEARS AGO, THE UNITED STATES PUBLIC HEALTH SERVICE PERFORMED AN IMPORTANT SERVICE BY CREATING THE 14-STEP PROJECT FOR CERVICAL CANCER SCREENING PROJECTS. THE CANCER CONTROL BRANCH OF THE USPHS DEVELOPED THIS QUALITY CONTROL PROGRAM IN WHICH 14 STEPS WERE STRESSSED WHICH DETERMINED THE QUALITY OF THE CYTOLOGY SCREENING PROJECT. 1) PLANNING: ASSESSMENT OF THE POPULATION, PERSONNEL, AND FACILITIES; 2) ORIENTATION AND ADEQUATE TRAINING OF PROJECT PERSONNEL; 3) ENLISTMENT OF PATIENTS BY PUBLICITY AND MOTIVATION; 4) ORIENTATION OF PATIENTS: EDUCATION ABOUT...
PROCEDURES AND NATURE OF THE DISEASE: 5) PATIENTS RECORDS 6) PREPARING AND TAKING OF SMEAR; 7) CYTOLOGICAL EXAMINATIONS: PROCEDURES, INTERPRETAION OF THE SMEAR; 8) FOLLOW-UP OF SIGNIFICANT CYTOLOGY; 9) BIOPSY OF CONIZATION; 10) TISSUE DIAGNOSIS; 11) CLINICAL DIAGNOSIS; 12) TREATMENT. 13) PERIODIC FOLLOW-UP OF PATIENTS WITH NEGATIVE CYTOLOGY, 14) EVALUATION OF PROGRAM.

THE WALTON REPORT AND ITS SUBSEQUENT IMPACT ON CERVICAL CANCER SCREENING PROGRAMS IN CANADA. PP. 5, REF. 8.

LANGUAGE: ENGLISH

AUTHOR: 01) WORTH A J

SUBJECTS: 01) CANCER PROGRAMS
02) CERVIX NEOPLASMS/DIAGNOSIS
03) CERVIX NEOPLASMS/MORTALITY
04) CYTOLOGY

DOCUMENTS: 01) OBSTET GYNECOL
02) CRT. 457.845-49

LOCATION: CANADA

A SUMMARY AND DISCUSSION OF SOME OF THE IMPORTANT AND CONTROVERSIAL RECOMMENDATIONS IN THE ORIGINAL WALTON REPORT OF 1976 ON CERVICAL SCREENING PROGRAMS IN CANADA ARE PRESENTED. THE REACTIONS TO THE REPORT IN CANADA ARE BRIEFLY OUTLINED, PARTICULARLY AS RELATED TO THE FREQUENCY OF SCREENING, THE SUBSEQUENT MODIFICATIONS IN THE RECOMMENDATIONS BY THE RECONVISED TASK FORCE OF 1980, IN RESPONSE TO THE CONCERNS OF THE PROFESSION AND TO NEWLY AVAILABLE DATA ARE HIGHLIGHTED: 1) NO ATTEMPT SHOULD BE MADE TO CATEGORIZE HIGH-RISK WOMEN ON A GROUP BASIS; 2) SEXUALLY ACTIVE WOMEN SHOULD BE SCREENED ANNUALLY FROM AGES 16-35; 3) IN GENERAL, WOMEN OVER THE AGE OF 35 WHO HAVE REGULARLY PARTICIPATED IN SCREENING PROGRAMS OR WHO HAVE HAD AT LEAST 2 SCREENING TESTS WITHOUT SIGNIFICANT ATYPIA SHOULD BE SCREENED EVERY 5 YEARS. HOWEVER, WOMEN ASSESSED AS BEING AT CONTINUED HIGH RISK BY PHYSICIAN OR WHO IN THEIR OWN JUDGEMENT ARE AT HIGH RISK SHOULD NOT BE DISCOURAGED FROM HAVING SMEARS MORE FREQUENTLY.

EFFECT OF CYTOLOGIC SCREENING ON THE DETECTION OF CERVICAL CARCINOMA. PP. 4, REF. 14.

LANGUAGE: ENGLISH

AUTHORS: 01) YAJIMA A
02) MORI T
03) WAKISAKA T
04) SATA S
05) SUZUKI M

SUBJECTS: 01) CERVIX NEOPLASMS/DIAGNOSIS
02) CYTOLOGY
03) NEOPLASM INVASIVENESS

DOCUMENTS: 01) OBSTET GYNECOL
02) CRT. 457.850-53

LOCATION: JAPAN

AN INVESTIGATION OF 732 CASES HAS BEEN MADE OF THE RELATIONSHIP BETWEEN THE HISTOLOGICAL FEATURES OF DETECTED CANCERS OF THE UTERINE CERVIX AND THE HISTORY OF PREVIOUS CERVICAL SCREENING. SIX HUNDRED FORTY-NINE OF THE 732 (88.7%) CASES WITH CANCER OF THE UTERINE CERVIX WERE FROM THE UNSCREENED GROUP, AND ONLY 83 CASES (11.3%) WERE FROM THE SCREENED GROUP. FRANK INVASIVE CARCINOMA WAS FOUND IN 21.0% (136) OF THE FORMER GROUP AND IN ONLY 3.6% (2 CASES) OF THE LATTER. ADENOCARCINOMA OF THE UTERINE CERVIX WAS FOUND IN 0.3% 21 OF THE UNSCREENED CASES AND IN 7.2%
6 CASES IN THE UNSCREENED CASES. THOSE CASES WHO HAD CERVICAL SCREENING WITHIN 3 YEARS PRIOR TO A HISTOLOGICALLY CONFIRMED DIAGNOSIS. INVASIVE CARCINOMA (EXCLUDING ADENOCARCINOMA) WAS FOUND IN 23.9% OF 60 CASES WHERE CARCINOMA IN SITU WAS FOUND IN 76.7% THIS RATIO (1:4) OF INVASIVE CARCINOMA TO CARCINOMA IN SITU WAS UNCHANGED AMONG THE CASES OF THE GROUP REGARDLESS OF WHETHER THE INTERVAL FROM PREVIOUS SCREENING WAS 1 OR 3 YEARS.

OPTIMISING THE AGE, NUMBER OF TESTS, AND TEST INTERVAL FOR CERVICAL SCREENING IN CANADA. PP. 10. REF. 31.

LANGUAGE: ENGLISH
AUTHORS: 01) YU SHUN ZHANG 02) MILLER AB
03) SHERMAN GU

SUBJECTS: 01) CERVIX NEOPLASMS
02) CERVIX NEOPLASMS/MORTALITY
03) CYTOLGY

DOCUMENTS: 01) J EPID COMM HEALTH
02) CRT 457:954-63

LOCATION: CANADA

WITH A 75% TEST SENSITIVITY AND 85% POPULATION ACCEPTANCE, A PROGRAM DESIGNED TO REDUCE MORTALITY BY 25% WOULD COMMENCE AT AGE 25. IN addITION, TRIENNAL SCREENS TO AGE 52 OR BIENNIAL SCREENS TO AGE 40 AND QUINDENIAL SCREENS TO AGE 60. A TOTAL OF 70 TESTS IN A LIFETIME. A REPEAT TEST AT AGE 26 CONTRIBUTES NOTHING TO MORTALITY BENEFIT. NEVERTHELESS, ADDITIONAL MODIFICATIONS OF THE NATURAL HISTORY SPECIFICATIONS TO ACCOMMODATE THE HIGH-RISK YOUNGER WOMEN WOULD REQUIRE A MORE Frequent SCHEDULE OF EXAMINATIONS UNDER THE AGE OF 35. THIS REMOVED AT A SUBSTANTIAL "COST" IN TERMS OF THE TOTAL NUMBER OF EXAMINATIONS REQUIRED IN A POPULATION.

ATTENDANCE FOR CERVICAL SCREENING: A USEFUL PROBLEM? PP. 8. REF. 70.

LANGUAGE: ENGLISH
AUTHORS: 01) EARDLEY A
02) ELKIND AK
03) SPENCER B
04) HOBBS P
05) PENDLETON LL
06) HARAN D

SUBJECTS: 01) CERVIX NEOPLASMS/MORTALITY
02) CERVIX NEOPLASMS/CYTOLOGY
03) CYTOLGY
04) CYTOLOGY

DOCUMENTS: 01) SOC SCI MED
02) CRT 457:864-71

LOCATION: ENGLAND

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