

# Cervical Cancer Screening Programs: Technical Cooperation in the Caribbean<sup>1</sup>

Cervical cancer is an important public health problem in the Caribbean countries. The fact that a significant number of women in the subregion continue to suffer and die from this disease is even more tragic because cervical cancer is preventable.

The uterine cervix is the most common site of cancer in Caribbean women, a situation that has remained unchanged for many years. In 1981, cervical cancer had a crude incidence rate of 34.6 per 100 000 women, and it accounted for 23% of all cancers in females (1).

A retrospective study done in 1986 of the incidence of certain cancers in Barbados for the period 1976–1980 found a crude incidence rate of 34.9 per 100 000 for cervical cancer (invasive and *in situ*) (2). The largest proportion of cases of invasive cancer (25%) occurred in the 60–69 years age group; most of the carcinoma *in situ* occurred in the 30–39 age group.

Although cancer of the breast previously caused the greatest percentage of female cancer deaths in the subregion, the pattern of mortality appears to be changing, at least in the larger demographic units (3). Over the period 1980–1990, cervical cancer had a mortality rate of 16.5 per 100 000 females, while the rate for breast cancer was 15.1 per 100 000 (4).

With the knowledge that cervical cancer is associated with certain aspects of sexual behavior and that its early precancerous stages can be easily detected and treated, it is clear that prevention strategies should include both primary and secondary preven-

tion (5). The former should be addressed through promoting lifestyle changes to reduce behaviors that increase risk, and the latter through encouraging the use of Papanicolaou (Pap) smear screening to detect precancerous lesions. Cervical cancer screening programs in the Caribbean subregion have concentrated on increasing the number of women screened by Pap smear.

A five-year subregional Cervical Cancer Control Project was funded by French Cooperation, with an initial contribution from the Organization of Petroleum Exporting Countries (OPEC). The project was implemented by PAHO in 1990 in 10 countries and territories: Anguilla, Antigua and Barbuda, Barbados, British Virgin Islands, Dominica, Grenada, Montserrat, Saint Kitts and Nevis, Saint Lucia, and Saint Vincent and the Grenadines.

The total population of the countries involved in this project is 850 000 (the population of Barbados, the largest country, is 260 000, and that of Anguilla, the smallest, is 8 900). On average, less than 20% of the target population is being screened regularly, despite the fact that clinical services are well developed and facilities are available for screening by Pap smear. None of the countries as yet has a comprehensive national program for the prevention and control of cervical cancer.

## PROJECT GOAL, PURPOSE, AND OUTPUTS

The goal of the project was decreased mortality from invasive cervical cancer. Its purpose was to increase the number of women aged 25–69 years served by quality screening for cervical cancer. The outputs of the project were the following: de-

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velopment of health education strategies; availability of adequate resources through provision of equipment and training of personnel; establishment of information systems, including cervical cytology registries and cancer registries; implementation of laboratory quality control mechanisms; and effective management of the project. They are described in more detail below.

## Health Education Strategies

A knowledge, attitudes, beliefs, and practice (KABP) survey was carried out among the target population in Barbados and Grenada to aid in the production of health education materials. The survey showed that younger, better educated women were the ones having Pap smears. Most women thought that the Pap smear was a test done to detect cancer, rather than to detect its precursor lesions and prevent the development of cancer. The survey also found that men were joint decision-makers in health and financial matters, and that women were more likely to get smears if encouraged by health professionals.

Materials were produced to emphasize the preventive purpose of the Pap smear and the potential for early cure of disease detected. These materials included an information booklet entitled "Preventing Cervical Cancer: The Pap Smear, An Investment in Life"; public service announcements for radio and television; and pamphlets, posters, and brochures. An assessment done in Barbados of the impact of the materials showed no change in the percentage of women who had had a Pap smear in the past three years. However, there was a slight increase in the number of women who said that the test was done to prevent cancer.

## Availability of Adequate Resources

Equipment essential to the screening process has been provided and critical person-

nel have been trained. Training materials have been produced or procured and disseminated. A handbook, *Cervical Cancer Screening: An Introduction for Health Workers in the Caribbean*, was produced by the project, and two videotapes—"Taking Cervical Smears" and "How to Perform a Pap Smear Correctly"—were obtained from the British Society for Clinical Cytology and the American Cancer Society, respectively.

## Information Systems

The establishment of laboratory-based cervical cytology registries has been facilitated through (1) the provision of computers, monitors, printers, and modems for selected countries; (2) the production of a Cervical Cytology Request/Report Form; and (3) the development of cervical cytology registry system software.

The establishment of cancer registries has been encouraged through the identification of methods and necessary resources, as well as support for the participation of designated tumor registrars in a training course for personnel of cancer data systems at the University of California at San Francisco. A draft data entry form which is compatible with the WHO software selected for use (CANREG) was also developed. To provide systems support for the PAHO/WHO Office of Caribbean Program Coordination, a systems analyst was trained in CANREG at the International Agency for Research on Cancer (IARC), Lyon, France.

## Laboratory Quality Control

Quality control in laboratories has been facilitated by a meeting of pathologists in the Caribbean that was convened to discuss related issues; by exploration of the utility of the PAPNET semi-automated cytology screening system; and by collaboration with the Caribbean Epidemiology Center (CAREC).

## Project Management

The following have been obtained and/or produced: reports from countries on national project activities; some national statistics relating to Pap smears and cervical cancer; and annual project reports and interim project reports, which indicate the degree of achievement of the outputs. An evaluation of the degree to which the project purpose has been met was undertaken in June 1996; a subregional meeting to discuss lessons learned from the project and their implications for future prevention and control strategies in the Caribbean was held in October.

## OBSTACLES AND RECOMMENDATIONS

Issues identified as obstacles to the success of the project are listed below, followed by recommendations for improvement.

*Obstacle:* Lack of policies, perhaps due to a lack of awareness among and involvement of decision-makers at the highest levels, with resultant scarcity of resources for establishment and sustainability of screening programs.

*Recommendation:* Address through advocacy and demonstration of favorable cost-benefit ratio of screening.

*Obstacle:* Lack of early and continuing involvement of the target population by means of needs assessment and health education, dialogue, and participation in planning, implementation, and evaluation.

*Recommendation:* Address through appropriate quantitative and qualitative studies and involvement of women's groups and community groups.

*Obstacle:* Lack of systems to actively recruit women to come for screening, particularly older women who may not consider themselves to be at risk.

*Recommendation:* Address through appropriately targeted messages and creative

strategies, including offering smears in mobile clinics at workplaces and in communities, in addition to gynecologic, obstetric, postnatal, and family planning settings.

*Obstacle:* Current emphasis on detection rather than prevention and cure.

*Recommendation:* Address through simple, accurate information on the process of screening and the true purpose of the Pap smear.

*Obstacle:* Lack of education of health professionals and the public on the importance of screening programs, the need for a public health focus to complement the clinical focus, and the rationale for the recommended screening intervals.

*Recommendation:* Address through social marketing—i.e., appropriate education aimed at specific target groups.

*Obstacle:* Lack of appreciation by many national program managers of the public health aspects of cervical cancer. National program managers are often gynecologists with a predominantly clinical focus who are overburdened with competing tasks.

*Recommendation:* Address through careful determination of priorities and appropriate allocation of resources.

*Obstacle:* Less than optimal communication and collaboration within and outside ministries of health.

*Recommendation:* Address through wide participation in planning, implementation, and evaluation of programs, concentrating on priority issues and task-oriented behavior.

## CONCLUSION

Despite the above-mentioned pitfalls, the project has had a positive impact. A number of valuable steps have been taken and processes put into motion for the achievement of greater coverage by cytological screening of women at risk of cervical cancer and for their follow-up and treatment.

These processes will be continued at the national level, according to the needs of the participating countries.

The project has been successful in raising the awareness of decision-makers and some segments of the public of the importance of cervical cancer as a public health problem. Greater involvement of nongovernmental organizations, greater emphasis on the education of health professionals regarding the public health aspects of this issue, and direct education of the public will be useful strategies for the future.

## REFERENCES

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