Cervical Cancer Prevention Project for Inner City Black and Latina Women

ANDREA RUDOLPH
VICTORIA KAHAN
MICHELLE BORDEU

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Tearsheet requests to Andrea Rudolph, 1810 Commonwealth Ave., No. 12, Brighton, MA 02135; tel. (617) 739-0927.

Synopsis

Early detection, appropriate intervention, and adequate followup treatment make cervical cancer one of the most preventable of all diseases. The authors propose a project designed to increase knowledge and awareness of cervical cancer and its prevention and ultimately to decrease morbidity and mortality rates for cervical cancer in black and Latino inner-city communities of Boston. During a 3-year project the authors hope to reach about 500 high-risk women who currently do not have access to health care services. The interventions would be based in the Boston, MA, community areas of Roxbury and Jamaica Plain, specifically in those neighborhoods served by a designated community health center.

High rates of cervical cancer are found in inner-city communities, where black and Latina women usually are overrepresented. About 80 percent of the women served by the designated community health center are either black or Latina. The proposed intervention has three objectives: (a) to increase the use of health services by so-called hard-to-reach women in those communities; (b) to reduce the numbers of women who, after learning of their abnormal Papanicolaou test results, do not return for followup; and (c) to increase sensitivities toward the problem and to encourage participation in such a project among health care providers at the community health center.

EARLY DETECTION, appropriate intervention, and adequate followup treatment make cervical cancer one of the most preventable of diseases. The age-adjusted cervical cancer incidence rate in 1987 for black women was 15.3 cases per 100,000 population and 7.6 per 100,000 for white women (*1*). The Centers for Disease Control in 1987 estimated cervical cancer mortality for black women at 2.6 times the rate for white women (*2*).

The national incidence and mortality rates for cervical cancer are high among certain subgroups of Hispanic women, such as Puerto Ricans and Mexican Americans, for whom low income, high unemployment, and lack of access to health care are strongly predisposing factors (*3, 4*). Morris and coworkers showed that the incidence of invasive cervical cancer in 1985 was 7.3 times greater for women with Hispanic surnames than for women with non-Hispanic surnames (*5*).

High rates of mortality for cervical cancer among nonwhite women are associated with complex cultural and socioeconomic factors that women often face in inner-city communities. Those factors range from a lack of health insurance to cultural attitudes and beliefs about cancer and its prevention. The most important risk factors for cervical cancer are a lack of access to screening, treatment, and followup (*4, 6*).

In the inner-city communities of Boston, most black and Latina women are of low socioeconomic status. Many women may lack adequate health insurance or easy access to a community health center. As a result, they usually are not screened regularly for cervical cancer and do not receive regular followup care once they have an abnormal Papanicolaou (Pap) test result or are diagnosed with cervical cancer (*4, 7-9*).

A major concern in those communities is the increasing number of women who contract human immunodeficiency virus (HIV) infection or have

symptoms of acquired immunodeficiency syndrome (AIDS). Women at risk for HIV and other sexually transmitted diseases are susceptible to cervical cancer owing to similar risk factors for both diseases. Cervical cancer is one of many AIDS-related diseases among women. Because of their special risk for cervical cancer, and the prevalence of the disease nationally, our intervention project was designed to benefit women within an inner city area.

Literature Summary

Some notable programs have addressed high mortality rates for cervical cancer among women in inner-city communities. One was based in Forsyth County, NC (*10–13*). Another was conducted in Chicago, IL (*14*). Both comprehensively addressed the factors influencing Pap test screening in high-risk communities.

Some outstanding features of the Forsyth County program were (*a*) using focus groups to assess women's attitudes and beliefs about cancer and prevention, (*b*) using community establishments to disseminate educational information, and (*c*) involving community leaders to promote the program and to encourage its longevity. The project in Chicago, which includes outreach and educational components, emphasizes the importance of community involvement to increase access to health services. Those programs, as well as our proposed intervention, were based on two related conceptual frameworks, community empowerment as a model for change and the normative-reeducative strategy for influencing change.

In both models, participation in a social group and adherence to acceptable social norms had a large effect on inducing behavior change among residents. Braithwaite and Lythcott stressed the importance of community empowerment as a way to counteract feelings of hopelessness, alienation from social influence, attitudes of self-blame, and a sense of generalized distrust (*15*). Chin and Benne suggested that normative-reeducative strategies for change are based on the idea that "patterns of action and practice are supported by sociocultural norms and by commitments on the part of individuals to these norms" (*16*). Both conceptual frameworks speak to the importance of fostering community ownership of a problem, thereby encouraging participation and input from community members at all stages of the project. Such a model increases the likelihood of the success and longevity of a community-based intervention.

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Project Objectives

Three objectives guide the plan to decrease the incidence and mortality rates of cervical cancer among black and Latina women in the inner-city communities. The first is to increase the participation of hard-to-reach women from the community in a Pap test screening protocol. The second is to reduce the numbers of women who receive abnormal Pap test results but do not participate in followup. The third is to increase an awareness of the problem among health care providers, enhancing their sensitivity to it and encouraging their participation in the program.

Meeting those objectives will help achieve the following outcomes

- increased awareness of cervical cancer and improved rates of screening among black and Latina women who do not obtain annual Pap tests or who do not access the health center for other health services,
- reduction of barriers to the use of the health center by black and Latina women,
- more adequate treatment resulting in a long-term reduction in cervical cancer morbidity and mortality, and
- community ownership of the program and an effective collaborative relationship with the center's health care providers.

Methodology

The project would require the services of two staff persons to provide community outreach as well as to provide liaison with the care providers at the community health center. The two staff members would be a nurse practitioner and an outreach worker who also functions as a case manager. Both would be Spanish speaking, Latina, and bicultural. Their roles would be to collaborate with community leaders, women of the community, and health care providers at the center. Other personnel involved would be support staff persons at the center and a half-time person to provide clerical services

to supplement those of a person in an existing half-time position.

Increasing the participation of the hard-to-reach. Hard-to-reach refers to women who do not respond to the usual methods of outreach, such as telephone calls, letters, and pamphlets. If they access a community health center at all, they typically do not do so until they are in a health crisis. Achieving this objective requires appropriate outreach activities to establish and maintain communication and participation, provide information and support, and to enable women to access health center services for regular Pap tests and other primary care services.

Selecting and collecting information materials. The outreach worker-case manager and the nurse practitioner will gather and organize information on cervical cancer in both Spanish and English, as well as on the health center's clinic hours and ways to access services.

Community networking. The outreach worker will identify community leaders for involvement in the program. Their cooperation will be solicited primarily by telephone calls and onsite interviews.

Their continued support will be maintained largely through telephone calls and visits. The outreach worker will maintain community leaders' involvement by updating them on health center program developments and gathering information on changing community needs and developments.

Health center in-reach. Through interviews with health center registrants, family health workers and health care providers will identify women family members and friends who have not visited the clinic. Providers will ask clients if they are interested in hosting a social event at their home, a prevention awareness party modeled after a safety net party. There will be a $50 incentive for host participation. Staff members will provide food and beverages for all participants.

Pap Awareness Party (PAP). The intervention is modeled after successful community-based health education programs that make available information on HIV and AIDS. The intervention is designed to improve understanding of health promotion and disease prevention efforts related to encouraging Pap test screening and cervical cancer prevention. As a forum for discussion, it will help identify and reduce attitudinal and structural barriers to accessing health care, such as fear, lack of transportation, and lack of child care. The parties will be facilitated by the staff nurse practitioner and the outreach worker and will be conducted twice monthly, once in Spanish and once in English.

Followup of party participants. The staff outreach worker will coordinate followup activities with those who participate in the parties, speaking with each woman a month after her attendance if she has not visited the health center. The staff member will try to arrange a first appointment at the health center, making two telephone calls or a home visit.

Reducing the numbers of women with abnormal test results who do not participate in followup. Supplementing the existing protocol at the health center, the outreach worker will talk with women who have received abnormal Pap test results but who have not participated in medical followup. The steps are

- Document the date and the nature of the test,
- Telephone to inform the woman of her test result and to schedule a repeat test or treatment, as indicated,
- If unable to talk by telephone, write up to three letters, the last to be sent registered mail,
- If there is no response, make a visit,
- If treatment is necessary, the outreach worker will accompany the client to the first appointment, if she agrees.

Walk-in Pap test screening clinic. The nurse practitioner will operate a walk-in screening clinic one morning each week. No appointment will be necessary and clients will be seen on a first-come, first served basis. The clinic serves to minimize the telephone calls and waiting period involved in scheduling an appointment.

The health center's van will be used for transportation both to and from the health center during the walk-in clinic hours. This will serve to minimize structural barriers to accessing the health center because of lack of transportation.

In-home Pap test intervention. The nurse practitioner will provide in-home Pap test screening for women whose test results indicate a need for quarterly testing. In spite of outreach efforts and

providing transportation, there usually will be some women who, for lack of child care, are unable to come to the health center. The activity will improve participation in followup by women whose only treatment need is repeated testing.

Increasing the sensitivity and participation of health care providers. The nurse practitioner will attend health center medical staff meetings to provide information on the progress of the program. A community leader who has been involved in the project will attend some meetings to provide information on community activities and needs related to the program and on related health care issues.

Open-house program. The health center staff will be invited to attend an open house where the prevention program will be presented. Discussion topics will be the aims of the project, the basis for the various intervention strategies, specific plans for carrying them out, and strategies for formally integrating the interventions into services of the health center.

Project Significance and Innovations

The proposed intervention addresses the complex factors and competing priorities that increase the risks for cervical cancer among poor women in the inner-city communities of Boston. By addressing issues of access and followup, increasing awareness of cervical cancer prevention, and fostering a relationship between community members and health care providers, the program offers a comprehensive approach to the problem (*17, 18*). Notable aspects of the project include the outreach component, the walk-in clinic, Pap tests provided at home, and support for followup. The activities complement existing services, maximize resources, and offer an alternative method of outreach and primary care.

Many cervical cancer prevention programs are designed to increase screening. However, if a screening program is to be effective, it must incorporate detection and treatment. One of the innovations in the program is a substantial focus on followup of women with abnormal Pap test results. Our intervention considers the factors that many poor inner-city women face in initiating and maintaining their use of health services. Other innovative characteristics of this project include its comprehensive design and use of existing health center resources. The combination of innovations and feasibility promises the program's success in inner-city communities.

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Evaluation

Evaluation will be carried out by an outside consultant who will be responsible for developing evaluation tools and materials. A review board will meet every 6 months to reevaluate the goals of the program and its implementation. Specifically, the consultant will evaluate the process and the outcome of the intervention by comparing them with a control sample of similar women served by another health center in the same communities.

Process evaluation will describe the implementation of the program and will provide information on our program structure, procedures, and accomplishments. The process evaluation will examine how the program is implemented, which outputs are produced, and how closely the actual program followed the initial design.

Outcome evaluation will focus on the effects of the intervention. Intermediate outcome measures will be used to determine if any changes occurred in knowledge, attitudes, and behaviors related to Pap test screening as a result of the program. The evaluator will look at the intervention's long-term effects on help-seeking behavior and use of the health center.

The long-term outcome evaluation will assess morbidity and mortality rates for cervical cancer. Owing to the long latency period for cervical cancer, changes may not be detected for several years. Long-term outcome evaluation will compare current mortality rates to mortality rates several years from the proposed intervention. Baseline mortality data will be collected through the Cancer Registry.

Budget

The estimated budget for 3 years is $596,300.

Personnel, $338,000 (nurse practitioner, $128,000; case manager-outreach worker, $72,000; fringe benefits, $45,000; clerical, $33,000; and Pap test interpretation fees, 400 test results per year, $60,000)

Nonpersonnel, $15,000 (prevention awareness parties, food, incentives for hosts, Pap test supplies, and office supplies)

Education and outreach, $3,000 (materials and translation services)

Local travel, $300

Overhead, $ 120,000 (health center facilities, telephone, postage, space, and staff services)

Evaluation, $120,000 (contractor).

References

1. National Cancer Institute. Cancer statistics review, 1973-1987. NIH Publication No. (PHS) 89-2789. National Institutes of Health, Bethesda, MD, 1989.
2. Centers for Disease Control: From the CDC: black-white differences in cervical cancer mortality—United States, 1980-1987. JAMA 262: 3001-3002, June 13, 1990.
3. Solis, J. M., et al.: Acculturation, access to care and use of preventive services by Hispanics: findings from HHANES, 1982-84. Am J Public Health 80 (supp): 11-19 (1990).
4. Harlan, L. C., et al.: Cervical cancer screening: who is not screened and why? Am J Public Health 81: 885-890 (1991).
5. Morris, D. L., et al.: Cervical cancer, a major killer of Hispanic women: implications for health education. Health Educ 20: 23-28 (1989).
6. Brinton, L., et al.: Sexual and reproductive risk factors for invasive squamous cell cervical cancer. J Natl Cancer Inst 79: 23-30 (1987).
7. Marcus, A. C., et al.: Screening for cervical cancer in emergency centers and sexually transmitted disease clinics. Obstet Gynecol 75: 453-455 (1990).
8. Celentano, D. D., et al.: Cervical cancer screening practices among older women: results from the Maryland cervical cancer case-control study. J Clin Epidemiol 41: 531-541 (1988).
9. Mandelblatt, J., et al.: Determinants of late stage diagnosis of breast and cervical cancer: the impact of age, race, social class, and hospital type. Am J Public Health 81: 646-649 (1991).
10. Dignan M., et al.: The role of focus groups in health education for cervical cancer among minority women. J Community Health 15: 369-376 (1990).
11. Michielutte, R., et al.: Development of a community cancer education program: the Forsyth County, NC, cervical cancer prevention project. Public Health Rep 104: 541-551, November-December 1989.
12. Michielutte R., and Beal, P.: Identification of community leadership in the development of public health education programs. J Community Health 15: 59-68 (1990).
13. Michielutte R., et al.: Noncompliance in screening follow-up among family planning clinic patients with cervical dysplasia. Prev Med 14: 248-258 (1985).
14. Lacey, L. P., et al.: An urban community-based cancer prevention screening and health education intervention in Chicago. Public Health Rep 104: 536-541, November-December 1989.
15. Braithwaite, R. L., and Lythcott, N.: Community empowerment as a strategy for health promotion for black and other minority populations. JAMA 261: 282-283, Jan. 13, 1989.
16. Chin, R., and Benne, K. D.: General strategies for affecting changes in human systems. *In* The planning of change. Holt, Rinehart and Winston, Inc., New York, NY, 1969, pp. 32-59.
17. Becker, M. H.: Patient adherence to prescribed therapies. Medical Care 23: 539-555 (1985).
18. Mamon, J. A., et al.: Inner-city women at risk for cervical cancer: behavioral and utilization factors related to inadequate screening. Prev Med 19: 363-376 (1990).