

Cervical cancer: screening hard-to-reach groups

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Résumé

MALGRÉ L'IMPORTANCE INDISPUTABLE du dépistage du cancer du col utérin, une proportion importante de Canadiennes ne passent pas, ou pas assez souvent, de tests de dépistage. Il est vraisemblable que certaines de ces femmes répondront à de simples stratégies de promotion du dépistage, mais ces stratégies pourraient se révéler inefficaces pour les groupes difficiles à joindre celles les femmes âgées, les autochtones, les pauvres et les immigrantes. Une meilleure connaissance des obstacles spécifiques au dépistage pour chacun des sous-groupes susmentionnés s'impose; la recherche qualitative peut dégager des connaissances précieuses à cet égard. Les prestataires de soins primaires sont un élément clé de la réussite de toute intervention de dépistage, à l'intérieur ou non d'un programme formel de dépistage. Pour la population en général, il faudrait privilégier les programmes formels de dépistage; selon l'efficacité de ces programmes, on redirigera ensuite des ressources présentement affectées à une population abondamment servie vers les groupes difficiles à rejoindre.

At a time when much controversy surrounds different screening manoeuvres,¹ screening for cervical cancer remains one of the few such manoeuvres with incontestable benefits.^{2,3} Despite a lack of evidence from randomized controlled trials, there is no dispute that screening for cervical cancer through Papanicolaou (Pap) testing has resulted in a marked decrease in incidence and mortality rates of cervical cancer.²⁻⁴ This is clearly a success story. Or is it?

Supporting the success of cervical screening are statistics from *developed* countries showing that since the introduction of the Pap test⁴ cervical cancer has dropped from being a principal to a rare form of fatal cancer in women.^{3,4} However, this success is diminished by the fact that cervical cancer is still the principal cause of death among women in most *developing* countries.^{4,5} Even in Canada, despite a dramatic overall decrease in the rate of death from cancer of the cervix,^{2,3} the rate continues to be 6 times higher in the native population than in the general population,⁶ and 50% of all women with invasive cancer of the cervix have never had a Pap test.⁷ Furthermore, women who are underscreened or who have never been screened are from the same groups as women who present with more advanced disease^{8,9} and account for the majority of women who die from cancer of the cervix.^{2,8,9} Moreover, although many women at high risk are underscreened or never screened, there is substantial evidence that women at low risk are overscreened.^{2,3,5,7}

In this issue (page 521) Drs. Sharon K. Buehler and Wanda L. Parsons present their evaluation of a simple low-cost strategy to increase compliance with Pap testing among under- and never-screened women in Newfoundland. Such initiatives are important: cervical cancer is one of the few cancers that we can actually *prevent* through adequate screening.¹⁰

Who are underscreened or never screened?

Experience with cervical screening suggests that women who are targeted for screening fall broadly into 3 groups. Women in the first group — which in Canada represents most women^{11,12} — respond to screening if they are made aware of its importance and benefits, and if it is made reasonably accessible



Editorial

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(whether through a formal program or regular contact with a primary care physician). Women in the second group respond to a more proactive approach,¹³ such as the call/recall system evaluated by Buehler and Parsons. Then there is the third group: women who are hard to reach with health promotion messages.

Taken as a whole, hard-to-reach candidates for screening represent a small proportion of Canadian women. However, they form the majority in the very subgroups that are most at risk of cervical cancer.^{11,14} Studies such as the 1994 National Population Health Survey (NPHS) consistently show that immigrant women, elderly women and women of low socioeconomic status tend to be underscreened or never screened.^{5,9,11,12} Although the NPHS does not tell us anything about native women, data from the Northwest Territories show that 52% of the target population are inadequately screened and that there are large variations between different ethnic and age groups.¹⁴

Targeting hard-to-reach women

The under- and never-screened women in Buehler and Parsons' study likely represent hard-to-reach groups. For these women, as the authors point out, aggressive recruitment strategies may be necessary. Creative strategies are needed to identify barriers to screening and gain insight into the needs of these women. Qualitative research may be helpful in this regard. For example, interviews and focus groups involving under- and never-screened native⁶ and immigrant¹⁵ women revealed that although some of the reasons for not being screened were related to health care delivery and amenable to improvement (e.g., lack of knowledge about the test or lack of continuity of clinician), other reasons were embarrassment or feeling physically or psychologically uncomfortable (especially with male physicians).⁶ These more complex barriers could never be overcome by a simple call/recall strategy and may explain why the intervention evaluated by Buehler and Parsons was not successful.

Clearly, no single recruitment strategy will work for all hard-to-reach women. It is likely that each subgroup has a different reason for not presenting for a Pap test and requires a different strategy.^{5,15} The literature shows that elderly women may feel they are not at risk or are unaware of the benefits of screening;⁹ that immigrant women may have language or other barriers to screening;^{5,15} and that for other women it may be a question of their sense of control over their own health.¹² Despite our publicly financed health care system, personal expenses can be an important barrier to screening for women who are poor.¹⁶ Even with a formal screening program in place, special efforts must be made to tailor recruitment strategies to high-risk groups that are inadequately screened.^{2,5,7}

The role of primary care providers

Buehler and Parsons hypothesize that the proportion of under- and never-screened women in their study sample was smaller than provincial data predicted (15% v. 30%) because the physicians in the practices sampled were particularly active in promoting screening. This is a valid hypothesis. The pivotal role primary care providers play in any screening intervention is widely recognized.¹³ These providers can seize the moment for opportunistic screening or promote regular screening for women in their practices.^{2,7,9,13} Lack of continuing care with a primary care physician has been identified as one of the important risk factors for never having had a Pap test.^{7,8,12} Regular contact with a nurse practitioner is associated with regular screening among women from some ethnic groups.^{8,9,14} Culturally sensitive recruiting of women in Brazil to primary care resulted, within 1 year, in a 30%–40% improvement in cervical screening rates (Dr. Yves Talbot, Family Health Program, Brazil: personal communication, 1997).

Formal programs can certainly make important contributions to the success of screening for cervical cancer. They play an important role in establishing population-based call/recall systems, standardizing high-quality screening and follow-through, and collecting and collating surveillance data. However, they do not provide answers for improving recruitment in hard-to-reach groups. The evidence from Buehler and Parsons as well as others^{8,13} is that proactive screening by primary care providers can be as effective as a call/recall system, but that neither alone will bring in hard-to-reach patients.^{2,7,13}

Conclusion

One might wonder whether all this effort to improve screening rates among hard-to-reach groups is worth it. Cost-effective interventions are the order of the day. Although it is estimated that up to 90% of invasive cancers of the cervix could be prevented by regular Pap testing,^{2,3} cervical screening in Canada now suffers from the problem of diminishing returns: it has reached a plateau,^{7,12} and greater resources are now needed to achieve small increments in recruitment rates.

The Ontario Ministry of Health recently made a clear statement that efforts to increase recruitment rates *are* worth while. The ministry will be introducing a formal cervical cancer screening program in the province (as has been done in BC and Nova Scotia⁷). One of the several benefits of formal programs is that the savings they achieve by reducing overscreening among women at low risk can be channelled into efforts to reach women at high risk who are underscreened or never screened.³ Such a transfer of



resources can be expected to improve case-detection rates — one of the best measures of the cost-effectiveness of a screening manoeuvre.¹⁷ Furthermore, if the promise of further reductions in cervical cancer rates is realized, the savings from primary treatment and long-term care of women with invasive cancer of the cervix would quickly result in a net cost savings to the health care system.^{2,3}

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References

- Russell LB. *Educated guesses: making policy about medical screening tests*. Berkeley (CA): University of California Press; 1994.
- Miller AB, Anderson G, Brisson J, Laidlaw J, Le Pitre N, Malcolmson P, et al. Report of a national workshop on screening for cancer of the cervix. *Can Med Assoc J* 1991;145:1301-25.
- Eddy DM. Screening for cervical cancer. *Ann Intern Med* 1990;113:214-26.
- Kline TS. The Papanicolaou smear: a brief historical perspective and where we are today. *Arch Pathol Lab Med* 1997;121:205-9.
- Luke K. Cervical cancer screening: meeting the needs of minority ethnic women. *Br J Cancer* 1996;74:S47-S50.
- Hislop TG, Clarke HF, Deschamps M, Joseph R, Band PR, Smith J, et al. Cervical cytology screening: How can we improve rates among First Nations women in urban British Columbia? *Can Fam Physician* 1996;42:1701-8.
- Parboosingh EJ, Anderson G, Clarke EA, Inhaber S, Kaegi E, Mills C, et al. Cervical cancer screening: Are the 1989 recommendations still valid? *Can Med Assoc J* 1996;154:1847-53.
- Sawyer JA, Earp J, Fletcher RH, Daye FF, Wynn TM. Pap tests of rural black women. *J Gen Intern Med* 1990;5:115-9.
- Mandelblatt J, Traxler M, Lakin P, Kanetsky P, Kao R, Harlem Study Team. Targeting breast and cervical cancer screening to elderly poor black women: Who will participate? *Prev Med* 1993;22:20-33.
- Cohen MM. Why is there no progress against cervical cancer? *Can Med Assoc J* 1996;154:1867-9.
- Snider J, Beauvais J, Levy I, Villeneuve P, Pennock J. Trends in mammography and Pap smear utilization in Canada. *Chronic Dis Can* 1996;17:108-17.
- Maxwell C, Kozak JF, Desjardins-Denault S. *Factors important in promoting cervical cancer screening behaviours among Canadian women: regional comparisons. A report for Disease Prevention Division*. Ottawa: Health Canada; 1996.
- Cecchini S, Grazzini G, Bartoli D, Falvo I, Ciatto S. An attempt to increase compliance to cervical cancer screening through general practitioners. *Tumori* 1989;75:615-8.
- Carr C. Screening for cervical cancer: Why is screening important? *EpiNorth* 1996;Sept/Oct:1-3. [www.hltss.gov.nt.ca]
- Kelly AW, Del Mar Fores Chacori M, Wollan PC, Trapp MA, Weaver AL, Barrier PA, et al. A program to increase breast and cervical cancer screening for Cambodian women in a midwestern community. *Mayo Clin Proc* 1996;71:437-44.
- Sculpher MJ, Buxton MJ. *The private costs incurred when patients visit screening clinics: the cases of screening for breast cancer and for diabetic retinopathy*. Uxbridge (UK): Brunel University; 1993. p. 1-18.
- Torgerson DJ, Donaldson C. An economic view of high compliance as a screening objective. *BMJ* 1994;308:117-9.

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