Facilitators and Barriers to Cervical Cancer Screening Among Chinese Canadian Women

T.G. Hislop[1,2]
M. Deschamps[3]
C. Teh[1,2]
C. Jackson[4,5]
S-P. Tu[4,5]
Y. Yasui[6]
S.M. Schwartz[6,7]
A. Kuniyuki[6]
V. Taylor[6,8]

ABSTRACT

Background: Chinese Canadian women have higher cervical cancer incidence, and lower Pap testing, rates than the general Canadian population. Predisposing, enabling and reinforcing factors associated with ever having a Pap test, and having a recent Pap test within the last 2 years, were assessed in Chinese women in British Columbia using the PRECEDE-PROCEED model.

Method: Chinese women (n=512) between the ages of 20 and 79 years and residing in Greater Vancouver were interviewed about Pap testing, health care, traditional health beliefs, acculturation and sociodemographic characteristics. Two analyses were done, comparing women who had ever and never had a Pap test, and comparing women who had and had not received a recent Pap test. Focus groups and qualitative interviews ensured cultural sensitivity in the survey questionnaire.

Results: Seventy-six percent reported ever having a Pap test and 57% reported having a Pap test within the last 2 years. Traditional health beliefs were not associated with ever or recent Pap testing. However, belief that Pap testing prevented cancer and general knowledge about the Pap test were associated with screening. Concern about pain/discomfort with the test, availability of time, culturally sensitive health care services and recommendation for Pap testing by a physician were also associated with screening. Factors differed for ever, and recently, having a Pap test.

Interpretation: Pap testing is less common among Chinese Canadian women. Continuing education about Pap testing is recommended for physicians serving underscreened Chinese women. Culturally and linguistically appropriate educational materials are needed for the Chinese community.

La traduction du résumé se trouve à la fin de l'article.

1. Population and Preventive Oncology, BC Cancer Agency, Vancouver, BC
2. Cancer Control Research Program, BC Cancer Agency
3. Direction de la Santé Publique Montréal-Centre, Québec
4. Department of Medicine, University of Washington, Seattle, WA
5. International Medicine Clinic, Harborview Medical Center, Seattle
6. Division of Public Health Sciences, Fred Hutchinson Cancer Research Center, Seattle
7. Department of Epidemiology, University of Washington
8. Department of Health Services, University of Washington

Correspondence: Dr. T. Gregory Hislop, BC Cancer Agency, 600 West 10th Avenue, Vancouver, BC V5Z 4E6, Tel: 604-877-6000, Fax: 604-872-1868, E-mail: ghislop@bccancer.bc.ca

Acknowledgements: This work was supported by the US National Cancer Institute (Grant #74326 and Cooperative Agreement #86322) and the British Columbia Health Research Foundation (Grant #180(96-2)).

We thank the women who participated in these interviews; the interviewers: C. Chan, I. Chan, L. Hsu, A. Ko, S. Leung, M. Li, J. Ng, E. Ng, C. Pang, G. Troung; the community advisory coalition: I. Chan and L. Lai (Canadian Cancer Society), Dr. J. Ko (Taiwanese Canadian Cultural Society), G. Mumick (Vancouver-Richmond Health Board), S. Leung (SUCCESS), Dr. L. Sent (Asian Women's Health Clinic), Dr. C. Wang (Chinese Canadian Medical Society), Dr. M. Yu (Chinese Cultural Centre); other members of the research team: T. Labo and A. Lai; and E. Baptiste for preparing the manuscript.

Recent immigration has contributed to substantial population growth among Chinese in British Columbia (BC), the majority of whom are foreign-born and coming mainly from East and Southeast Asia. In 1996, nearly 300,000 (8%) of the BC population identified themselves as Chinese,[1] the vast majority residing in Vancouver and adjacent Richmond; these municipalities have the highest density of Chinese people in Canada. Cervical cancer is a significant health problem in Chinese women, being the second leading cause of cancer deaths in Mainland China.[2] Chinese American women who were Asian-born have higher incidence rates than those who were North American-born, and BC Chinese women (irrespective of their place of birth) have twice the incidence of White women.[3] These findings may be explained in part by differences in Pap testing rates.[3-6]

Over 50 years ago, BC was the first jurisdiction in the world to establish an organized cervical cancer screening program, currently known as the Cervical Cancer Screening Program (CCSP). This program has been very effective in reducing incidence of, and deaths from, invasive cervical cancer by 85% and 78%, respectively.[7] However, approximately 25% of the age-eligible women in BC, representing approximately 1.3 million women, have not been screened in a recent 30-month period.[8] The CCSP is committed to developing strategies and educational materials to promote Pap testing in underserved communities.

We conducted a comprehensive evaluation of Pap testing in Chinese women in BC[9] and Washington State.[10] Lower Pap testing rates were found among Chinese women as compared to other BC women, and several sociodemographic factors were associated with less Pap testing, including older age, single marital status, having been born in Mainland China, lower education, lower household income and less acculturation.[9] This paper presents the results of more in-depth analyses that were performed using the PRECEDE-PROCEED model.[11] Predisposing, enabling and reinforcing factors were examined by comparing women who had ever and never had a previous Pap test, and by comparing women who had and had not received a

recent Pap test within the last 2 years. Predisposing factors involve individual motivation to participate in the CCSP and include knowledge, attitudes, beliefs, perceived value, perceived need and capacity to take action. Enabling factors involve availability and access to services. Reinforcing factors focus on the feedback and support given by society, peers and health professionals.

METHODS

Conceptual framework

A cross-sectional study was done using the PRECEDE-PROCEED model to develop the survey questionnaire and for analysis. This model consists of ten steps: the first five analyze the situation and establish priorities and objectives, and the last five deal with implementation, follow-up and evaluation of the program.

Within the first five steps, major problems and needs are identified with direct involvement of targeted population (Social Diagnosis); importance of these health problems are documented through survey and epidemiological data (Epidemiological Diagnosis); behavioural and lifestyle factors are identified that relate to the health problems (Behavioural and Environmental Diagnosis); factors are investigated that must be changed to maintain or modify behaviours or lifestyle (Educational and Organizational Diagnosis); and organizational resources are analyzed that influence the implementation of a program (Administrative and Policy Diagnosis). This paper will focus on Educational and Organizational Diagnosis.

Community advisory group

A Community Advisory Committee was formed to advise the research team throughout the study and to assist in introducing the study to the community. This representative committee included six members from different Chinese organizations serving the Cantonese- and Mandarin-speaking communities and two family physicians serving the Chinese community. The Chinese community was informed about the study through Chinese radio announcements, newspaper articles and newsletters of local Chinese organizations about one month before the start of the survey.

TABLE I

Sociodemographic Factors Associated with Pap Testing

Factor	Category	No.	% Ever Screened		% Recently Screened	
Age (years)	20-39	147	72.1	***	58.5	***
	40-59	248	85.9		69.8	
	60-69	74	66.2		36.5	
	70-79	43	44.2		18.6	
Place of Birth	Mainland China	247	69.6	*	49.4	**
	Hong Kong	174	79.3		63.2	
	SE Asia	21	90.5		76.2	
	Taiwan	28	78.6		50.0	
	North America	9	88.9		77.8	
	Other	33	84.8		75.8	
Marital Status	Currently married	419	82.3	***	64.9	***
	Previously married	53	60.4		30.2	
	Never married	40	25.0		15.0	
Education (years)	0-7	111	64.0	**	46.0	*
	8-12	202	81.7		62.4	
	13+	196	76.0		59.2	
Household Income	< $20K	107	69.2	**	52.3	**
	$20K - $29K	85	72.9		51.8	
	$30K - $49K	105	86.7		62.9	
	$50K+	65	87.7		75.4	
Housing Type	Owned	442	78.3	***	59.7	**
	Rented	47	63.8		48.9	
	Subsidized	13	30.8		15.4	
Proportion of Life in North America	0-13%	130	72.3		55.4	*
	14-26%	128	75.0		51.6	
	27-43%	136	71.3		55.9	
	44%+	117	84.6		68.4	
Speaks English Fluently	Yes	190	81.1	*	62.6	
	No	322	72.4		54.3	
Previous Hysterectomy	Yes	39	76.9		30.8	***
	No	473	75.5		59.6	

* p<0.05
** p<0.01
*** p<0.001

Survey questionnaire and training of interviewers

The survey questionnaire included sections on Pap testing and mammography screening, as adapted from the Pathways to Early Detection questionnaire which has been previously used in several Asian American populations.[6,12-14] Other sections included health care, women's health, traditional health models, acculturation and sociodemographic characteristics. In order to reduce the length of the interview, three versions of the questionnaire were created by combining different sections and the versions were randomly assigned to the households. Core questions on sociodemographic characteristics, acculturation factors and Pap screening histories were completed by all participants. The analysis for this paper was restricted to the version that inquired about predisposing, enabling and reinforcing factors associated with Pap testing.

Focus groups and open-ended interviews were conducted to determine culturally sensitive components for the questionnaire,[15] which was developed in English, translated into Cantonese and Mandarin, back-translated to ensure lexical equivalence, reconciled and pre-tested.[16] Home interviews were done by 11 trained female Chinese interviewers, fluent in Cantonese, Mandarin and English.

Selection of study group and interview process

Interviews were conducted between January and November, 1999. Households were randomly selected for interview from three Greater Vancouver neighbourhoods with high density of Chinese (Vancouver Old Chinatown, East Vancouver and Richmond, with 60%, 36% and 33% Chinese, respectively[17]) using the 1998 Vancouver telephone book and 178 common BC Chinese surnames.[18] Households selected for study were sent an introductory letter, written in both Chinese and English, that explained the purpose of the study and how the household was selected, and invited Chinese women between the ages of 20 to 79 years to participate.

Interviewers then made personal visits to each household and conducted the interview in the language of the woman's choice. Attempts were made to interview the oldest age-eligible woman where two or more eligible women were residing in the

TABLE II

Predisposing, Enabling and Reinforcing Factors Associated with Pap Testing

Factor	Category	No.	% Ever Screened		% Recently Screened	
Predisposing Factors						
Believed Pap smears can help prevent cancer	Yes	430	78.8	***	59.5	*
	No	81	58.0		45.7	
Thought Pap testing is necessary for asymptomatic women	Yes	444	81.1	***	63.3	***
	No	68	39.7		19.1	
Thought Pap testing is necessary for sexually inactive women	Yes	344	81.4	***	63.1	***
	No	167	64.1		46.1	
Thought Pap testing is necessary for postmenopausal women	Yes	417	80.3	***	63.3	***
	No	95	54.7		31.6	
Concerned about embarrassment	Yes	61	60.7	**	36.1	***
	No	451	77.6		60.3	
Concerned about pain/discomfort	Yes	41	51.2	***	29.3	***
	No	471	77.7		59.9	
Enabling Factors						
Ever received prenatal care in North America	Yes	193	87.6	***	70.5	***
	No	319	68.3		49.5	
Ever received family planning services in North America	Yes	125	84.8	**	64.8	
	No	387	72.6		55.0	
Ever heard of the Asian Women's Health Clinic†	Yes	49	93.9	**	73.5	*
	No	458	74.0		55.9	
Private insurance in addition to the Medical Service Plan	Yes	130	80.0		70.0	***
	No	380	74.5		53.4	
Regular physician	Chinese male	301	70.1	***	48.2	***
	Chinese female	147	85.0		73.5	
	Non-Chinese male	18	88.9		72.2	
	Non-Chinese female	11	100.0		81.8	
	None	29	62.1		48.3	
Lack of time	Yes	84	65.5	*	46.4	*
	No	427	77.5		59.5	
Thought Pap tests should be done by women's health specialists	Yes	298	70.5	***	51.0	***
	No	214	82.7		66.4	
Reinforcing Factors						
Recommendation by a:						
Physician	Yes	238	91.2	***	78.2	***
	No	272	61.8		39.3	
Family member	Yes	99	85.9	**	73.7	***
	No	413	73.1		53.5	
Friend	Yes	152	88.8	***	73.7	***
	No	360	70.0		50.6	

* p<0.05
** p<0.01
*** p<0.001
† a screening clinic in a local hospital providing Pap testing and breast self-examination instruction with service in Cantonese and Mandarin

home. The interviewers made at least five attempts (including daytime, evening and weekend) at contacting each household. Details of the selection process are described elsewhere.[9]

Data verification and analysis

Completed survey questionnaires were reviewed by a research assistant, and clarification of missing or ambiguous information was sought from the interviewers.

The analysis focused upon questions about predisposing, enabling and reinforcing factors, Pap testing history, health care and women's health, and compared, first, women who reported at least one prior Pap test (ever screened) to those who had never been screened, and second, women who reported receiving a Pap test within the last two years (recently screened) to those who had not. The chi-square test and, where necessary, Fisher's exact test were used to assess statistical significance in bivariate comparisons.[19] Unconditional logistic regression with forward selection was used to build the regression model.[20]

RESULTS

Households from the three neighbourhoods were randomly selected and, out of the 1,309 contacted and eligible households, 812 Chinese women (62%) consented to be interviewed. The final analysis for this paper was restricted to the 512 Chinese women who completed the questionnaire version inquiring about predisposing, enabling and reinforcing factors; who had no personal history of invasive cervical cancer; and who provided their Pap screening history (63% of those interviewed).

Bivariate analysis

Seventy-six percent of women (n=387) reported having received at least one prior Pap test, and 57% (n=294) reported having a recent Pap test within the last two years. The sociodemographic factors associated with ever and recent screening, and corresponding percentages receiving Pap testing, are shown in Table I. Predisposing, enabling and reinforcing factors associated with ever and recent screening, and corresponding percentages receiving Pap testing, are shown in Table II.

Multivariate analysis

Logistic regression analysis identified independent factors for Pap testing, as shown in Tables III and IV. A number of sociodemographic, predisposing, enabling and reinforcing factors remained significant for both ever and recent Pap testing. However, a number of factors were not significant. Traditional health beliefs and perceptions were not important. Indeed, the following beliefs were not associated with Pap testing: getting cancer is a matter of karma or fate (reported by 13% of the study group); cancer can be caused by an imbalance of *yin* and *yang* (type of *qi* or life force, balance is desired in order to achieve good health) (21%), or by poor *qi* (vital energy or life force) and blood circulation (27%); cancer can be prevented by faith (14%), by doing *qi gong* (form of physical exercise involving deep breathing of *qi*) (26%), or by taking herbs (32%); and cervical cancer risk is increased by not observing the sitting month (Chinese practice of rest and special foods during the month after childbirth in order to improve health) (16%). Difficulties in accessing services were not associated with Pap testing, such as getting transportation (9%), finding childcare (5%), needing interpreter services (13%), obtaining a routine appointment (27%), and concern about medical care cost (7%).

Finally, having close friends or relatives with a cancer history (63%) was not associated with Pap testing.

There were some differences between ever and recent screening. Fluency in English, belief that Pap testing can help prevent cancer, awareness of the Asian Women's Health Clinic (a screening clinic in a local hospital providing Pap testing and breast self-examination instruction with service in Cantonese and Mandarin), and lack of restriction of Pap testing to women's health specialists were only associated with ever having a Pap test. Birthplace outside of Mainland China or Taiwan, longer residence in North America, no previous hysterectomy, awareness that postmenopausal women should be screened, lack of concern about pain or discomfort during testing, having private insurance and having a regular physician (especially a Chinese female physician) were only associated with recent Pap testing.

DISCUSSION

Older, single, less acculturated Chinese women, with lower education and income are less likely to have been screened for cervical cancer in British Columbia[9] and Washington State.[10] This paper expands upon these observations by using the PRECEDE-PROCEED model to examine the predisposing, enabling and reinforcing factors which may affect participation in Pap testing. This model has been used in educational programs targeting minority populations.[11,13,21]

The relative importance of each factor in deciding to have an initial Pap test, and to continue to do so, may vary among women. Our study indicates that cultural factors such as belief in doing *qi gong*, taking herbs, balancing *yin* and *yang*, and observing the sitting month did not influence Pap testing in Chinese women. Rather, belief in the value of Pap testing in preventing cancer and general knowledge about the test increased the likelihood of having had Pap testing. Concern about pain with testing, and reported lack of time for this procedure, reduced the likelihood of having been screened. These findings have been reported in other population groups[22] and support the need for public education and health care provider

TABLE III

Independent Factors Associated with Ever Having a Pap Test (n=503)

Factor	Category	No.	OR*	95% CI	p-value
Sociodemographic Factors					
Age (years)	60-79	115	1.0		<0.001
	40-59	242	3.6	1.8, 7.1	
	20-39	146	1.8	0.9, 3.7	
Marital status	Never married	40	1.0		<0.001
	Currently married	412	18.5	7.4, 49.7	
	Previously married	51	22.0	6.6, 78.5	
Speaks English fluently	No	316	1.0		0.030
	Yes	187	2.0	1.1, 3.9	
Predisposing Factors					
Believed Pap smears can help prevent cancer	No	78	1.0		0.014
	Yes	425	2.3	1.2, 4.3	
Thought Pap testing is necessary for asymptomatic women	No	67	1.0		0.004
	Yes	436	2.8	1.4, 5.7	
Enabling Factors					
Ever heard of the Asian Women's Health Clinic	No	454	1.0		0.034
	Yes	49	3.3	1.1, 14.3	
Lack of time	No	420	1.0		0.026
	Yes	83	0.5	0.3, 0.9	
Thought Pap tests should be done by women's health specialists	No	210	1.0		0.034
	Yes	293	0.6	0.3, 1.0	
Reinforcing Factors:					
Recommendation by a physician	No	269	1.0		<0.001
	Yes	234	4.8	2.7, 9.0	

* Odds ratios adjusted for all other factors in table.

TABLE IV

Independent Factors Associated with Recently Having a Pap Test Within the Last 2 Years (n=500)

Factor	Category	No.	OR*	95% CI	p-value
Sociodemographic Factors					
Age (years)	60-79	114	1.0		<0.001
	40-59	244	3.9	2.1, 7.6	
	20-39	142	2.3	1.1, 4.8	
Place of birth	Mainland China	241	1.0		0.027
	Hong Kong	171	2.1	1.2, 3.6	
	SE Asia	20	2.1	0.6, 8.5	
	Taiwan	27	0.7	0.2,1.9	
	North America	8	3.3	0.3, 50.4	
	Other	33	2.9	1.0, 9.3	
Marital status	Never married	39	1.0		<0.001
	Currently married	410	15.5	5.0, 58.0	
	Previously married	51	11.9	3.0, 53.9	
Proportion of life in North America	44%+	113	1.0		0.027
	27-43%	132	0.9	0.4, 1.8	
	14-26%	127	0.4	0.2, 0.8	
	0-13%	128	0.7	0.3, 1.4	
Previous hysterectomy	No	462	1.0		<0.001
	Yes	38	0.1	0.01, 0.4	
Predisposing Factors					
Thought Pap testing is necessary for asymptomatic women	No	66	1.0		0.062
	Yes	434	2.2	1.0, 5.3	
Thought Pap testing is necessary for postmenopausal women	No	93	1.0		0.006
	Yes	407	2.5	1.3, 4.9	
Concerned about pain/discomfort	No	459	1.0		0.010
	Yes	41	0.3	0.1, 0.8	
Enabling Factors					
Private insurance in addition to the Medical Service Plan	No	371	1.0		0.041
	Yes	129	1.8	1.0, 3.3	
Regular physician	Chinese male	295	1.0		0.026
	Chinese female	147	2.0	1.2, 3.5	
	Non-Chinese male	18	4.4	1.1, 21.8	
	Non-Chinese female	11	0.5	0.1, 3.8	
	None	29	1.2	0.4, 3.6	
Lack of time	No	417	1.0		0.013
	Yes	83	0.4	0.2, 0.8	
Reinforcing Factors					
Recommendation by a physician	No	269	1.0		<0.001
	Yes	231	4.5	2.8, 7.5	

* Odds ratios adjusted for all other factors in table.

sensitivity to women's feelings and concerns prior to and during the screening process.[23]

The importance of providing health care services in a culturally sensitive manner is well established.[24,25] Awareness of the Asian Women's Health Clinic increased the likelihood of ever being screened. Women with Chinese female physicians were associated with recent Pap testing, while those with Chinese male physicians had less Pap testing. The number of women with non-Chinese physicians was very small; hence findings for this group are inconclusive. A recent study that included Chinese women reported that factors such as having a female physician, and receiving health services in their own language, influenced women during their decision-making process for screening. Physicians' support for Pap testing was clearly important for both initial and ongoing screening.[26,27] Different strategies may be required for the different stages in the decision process for regular Pap testing.

This study may have several limitations. Self-reporting of Pap testing history may be inaccurate. However, test-retest reliability for self-reporting of ever having had a Pap test, and for timing of the last Pap test, was found to be high in a study of Korean Americans.[28] The relatively low response rate may have introduced response bias. It is quite likely that those who refused to be interviewed would be less likely to have received Pap testing, hence screening rates may actually be lower than those reported. However, the overall Pap testing rates were not the focus of this study, rather the comparison of these rates according to predisposing, enabling and reinforcing factors. Strengths of this study include the PRECEDE-PROCEED model as the conceptual framework for development and analysis, and the inclusion of the results of qualitative interviews in the content of the questionnaire to ensure cultural sensitivity.

In conclusion, our study identifies several areas where action needs to be taken to improve Pap testing in Chinese women. The findings have relevance to Chinese communities throughout Canada who represent a significant and growing segment of the Canadian population. Continuing education about the need for Pap testing is recommended for physicians serving underscreened Chinese women. Culturally and linguistically appropriate educational materials are needed for the general public which address the value of Pap testing in preventing cervical cancer, provide guidelines as to who should be screened, and increase awareness of health care services available in Chinese. Several educational materials were developed as part of this initiative, including a video and written materials, and these were very effective in improving Pap testing when assessed in a randomized controlled trial.[29]

REFERENCES

1. Statistics Canada. Visible minority populations, 1996 Census, Canada, provinces and territories. Ottawa, ON: Statistics Canada, 1996. http://www.statcan.can/english/census96/feb17/vmbc.htm (retrieved 17 October 2000).
2. Guo W, Hsing AW, Li J, Chen JS, Chow WH, Blot WJ. Correlation of cervical cancer mortality with reproductive and dietary markers, and serum markers in China. *Int J Epidemiol* 1994;23:1127-32.
3. Archibald CP, Coldman AJ, Wong FL, Band PR, Gallagher RP. The incidence of cervical cancer among Chinese and Caucasians in British Columbia. *Can J Public Health* 1993;84:238-45.
4. Centers for Disease Control. Behavioral risk factor survey of Chinese: California, 1989. *MMWR* 1992:41:266-70.
5. Truman BI, Wing JS, Keenan NL. Asians and Pacific Islanders. In: Satcher D, Bales VS, Harris JR, Truman BI (Eds.), *Chronic Disease in Minority Populations.* Atlanta: Centers for Disease Control, 1994.
6. Hiatt RA, Pasick RJ, Pereq-Stable EJ, McPhee SJ, Engelstad L, Lee M, et al. Pathways to early cancer detection in the multiethnic population of the San Francisco Bay area. *Health Educ Q* 1996;23(Suppl):10-27.
7. Cervical Cancer Screening Program. 1999 Annual Report. Vancouver: BC Cancer Agency, 1999;4.
8. Cervical Cancer Screening Program. 2000 Annual Report. Vancouver: BC Cancer Agency, 2000;16.
9. Hislop TG, Teh C, Lai A, Labo T, Taylor VM. Sociodemographic factors associated with cervical cancer screening in BC Chinese women. *BCMJ* 2000;42:456-60.
10. Taylor V, Jackson JC, Tu S-P, Yasui Y, Schwartz SM, Kuniyuki A, et al. Cervical cancer screening among Chinese Americans. *Cancer Detection and Prevention* 2002;26:139-45.
11. Green L, Krueler M. Applications of PRECEDE-PROCEED in community settings. In: *Health Promotion Planning: An Educational and Environmental Approach.* Palo Alto: Mayfield, 1991.
12. Lee M, Lee F, Stewart S. Pathways to early breast and cervical cancer detection for Chinese American women. *Health Educ Q* 1996;23(Suppl):76-88.
13. McPhee SJ, Bird JA, Ha NT, Jenkins CNH, Fordham D, Le B. Pathways to early cancer detection for Vietnamese women: Health is gold. *Health Educ Q* 1996;23(Suppl):60-75.
14. Taylor VM, Jackson JC, Tu SP. Cancer control research among Cambodian Americans in Washington. *Asian Am Pac Isl J Health* 2000;8:32-38.
15. Jackson JC, Do H, Chitnarong K, Tu SP, Marchand A, Hislop G, Taylor V. Development of cervical cancer control interventions for Chinese immigrants. *J Immig Health* 2002;4:147-57.

…continues on page 73

RÉSUMÉ

Contexte : La proportion des Canadiennes d'origine chinoise qui se soumettent au test de Papanicolaou est plus faible, et les taux d'incidence du cancer du col de l'utérus sont plus élevés que dans la population canadienne en général. Nous avons utilisé le modèle *PRECEDE/PROCEED* pour évaluer la relation entre les facteurs de prédisposition, d'incitation et de renforcement et le fait d'avoir ou de ne pas avoir subi un test de Papanicolaou au cours des deux dernières années, chez les Canadiennes d'origine chinoise de la Colombie-Britannique.

Méthode : Nous avons mené des entrevues auprès de femmes d'origine chinoise (n=512) âgées de 20 à 79 ans qui habitent la région métropolitaine de Vancouver. Les questions ont porté sur le test de Papanicolaou, les soins de santé, les croyances traditionnelles en matière de santé, l'acculturation et les caractéristiques socio-démographiques. Nous avons ensuite établi une première comparaison entre les femmes qui ont déjà subi un test de Papanicolaou et celles qui ne l'ont jamais subi, et une deuxième entre celles qui ont ou qui n'ont pas subi le test récemment. Des groupes échantillons et des entretiens en profondeur ont permis de s'assurer que le questionnaire d'enquête prenait en compte les réalités culturelles.

Résultats : Parmi les femmes interrogées, 76 % ont déclaré n'avoir jamais subi un test de Papanicolaou et 57 % ont affirmé avoir subi le test au cours des deux dernières années. Nous n'avons pas établi de lien entre les croyances traditionnelles en matière de santé et le fait d'avoir ou de ne pas avoir subi un test de Papanicolaou. Cependant, nous avons pu établir une relation entre le dépistage et la connaissance générale du test de Papanicolaou et le fait de croire qu'il peut prévenir le cancer. Les préoccupations concernant la douleur causée par le test ou l'inconfort, le temps disponible, les services de santé culturellement adaptés et le fait d'être incitée à se soumettre au test de Papanicolaou par un médecin ont également été associés au dépistage. Les facteurs diffèrent dans le cas des femmes qui n'ont jamais subi un test de Papanicolaou ou de celles qui l'ont subi récemment.

Interprétation : Le test de Papanicolaou est une pratique moins courante chez les Canadiennes d'origine chinoise. Les médecins qui sont en contact avec des femmes d'origine chinoise qui ne se soumettent pas au test de dépistage devraient recevoir une formation continue sur le test de Papanicolaou. La communauté chinoise devrait avoir à sa disposition des documents éducatifs adaptés sur le plan culturel et linguistique.

16. Eyton J, Neuwirth G. Cross-cultural validity: Ethnocentrism in health studies with special reference to the Vietnamese. *Soc Sci Med* 1984;18:447-53.
17. Statistics Canada. Unpublished data. Ottawa, ON; 1996. http://ceps.statcan.ca/english/profil/PlaceSearchForm1.cfm
18. Hislop TG, Schwartz S, Taylor V, Jackson C, Tu SP. Identification of Chinese subjects for etiological and cancer control research: Description of sampling methods based upon surnames. North American Association of Central Cancer Registries Annual Meeting. New Orleans, April 15-20, 2000;87.
19. Rosner B. *Fundamentals of Biostatistics,* Fifth edition. Boston: Duxbury, 2000.
20. Breslow NE, Day NE. *Statistical Methods in Cancer Research,* Volume 1. Lyon: International Agency Cancer Research, 1980.
21. Michielutte R, Dignan MB, Wells HB, Young LD, Jackson DS, Sharp PC. Development of a community cancer education program: The Forsyth County, NC, cervical cancer prevention project. *Public Health Rep* 1989;104:542-51.
22. Deschamps M, Band PR, Hislop TG, Clarke HF, Smith JM, Ng VTY. Barriers to cervical cytology screening in Native women in British Columbia. *Cancer Detection and Prevention* 1992;16:337-39.
23. Orton M, Fitzpatrick R, Fuller A, Mant D, Mlynek C, Thorogood M. Factors affecting women's response to an invitation to attend for a second breast cancer screening examination. *Br J Gen Pract* 1991;41:320-22.
24. Chen A, Ng P, Sam P. Special health problems of Asians and Pacific Islanders. In: Matzen RN, Long RS (Eds.), *Clinical Preventive Medicine*. St. Louis: Mosby, 1993.
25. Uba L. Cultural barriers to health care for Southeast Asian refugees. *Public Health Rep* 1992;107:544-48.
26. Coyne CA, Hohman K, Levinson A. Reaching special populations with breast and cervical cancer public education. *J Cancer Educ* 1992;7:293-303.
27. Kelaher M, Gillespie AG, Allotey P, Manderson L, Potts H, Sheldrake M, et al. The Transtheoretical Model and cervical screening: Its application among culturally diverse communities in Queensland, Australia. *Ethnicity and Health* 1999;4:259-76.
28. Wismer BA, Moskowitz JM, Chen AM, Kang SH, Novotny TE, Min K, et al. Rates and independent correlates of Pap smear testing among Korean-American women. *Am J Public Health* 1998;88:656-60.
29. Taylor VM, Hislop TG, Jackson JC, Tu S-P, Yasui Y, Schwartz SM, et al. A randomized controlled trial of interventions to promote cervical cancer screening among Chinese women in North America. *JNCI* 2002;94:670-77.

Received: December 7, 2001
Accepted: July 17, 2002

YOU STILL HAVE TIME TO SUBMIT A PROPOSAL TO THE

2003 Canadian Social Welfare Policy Conference

CALL FOR PAPERS AND PRESENTATIONS

The biennial Canadian Social Welfare Policy Conference will be held at the University of Ottawa from June 15 to 17, 2003. **The title for the theme of this year's Conference is "Social Development in Canada: It's time to act"** and the plenary sessions will examine:

- The existing state of social development in Canada
- The key actors in social development
- The next steps to be taken

We encourage participation from researchers, policy analysts and activists from the voluntary and community sector, the public sector and the university sector. Participation can take a variety of forms: round tables, paper presentations, or posters. This year, subjects of particular interest include social inclusion, child poverty, the urban agenda, First Nations' policy, governance (who does what and at what level), regional social development, neighborhoods, performance measurement and social development, measuring quality of life. The focus of presentations can include description of innovative policies, initiatives, demonstration projects, and research results.

The deadline for proposals has been extended to January 6, 2003. They should include a title, identification of the theme being covered, a summary (approximately 250 words) of the proposal and a short bio of the author.

The proposals should be sent to socconf@uottawa.ca or to
Caroline Andrew
Social Welfare Policy Conference
Faculty of Social Sciences
University of Ottawa
Ottawa, ON K1N 6N5

People desiring further information can write to socconf@uottawa.ca or contact Céline Widmer at (613) 562-5800 (1854)

IL EST ENCORE TEMPS DE SOUMETTRE VOTRE PRÉSENTATION AU

Congrès sur les politiques sociales canadiennes 2003

APPEL DE PRÉSENTATIONS

Le Congrès bisannuel sur les politiques sociales canadiennes aura lieu à l'Université d'Ottawa, du 15 au 17 juin 2003. **Le titre du thème du Congrès de cette année est : « Le développement social au Canada: Il est temps d'agir »**. Les sessions plénières examineront :

- L'état actuel du développement social canadien
- Les acteurs qui, de façon collective, s'assurent de la mise en oeuvre du grand projet social
- Les prochaines étapes

Nous encourageons les contributions de chercheurs, d'analystes et d'activistes venant des secteurs bénévoles et communautaires, publics et universitaires. La participation au Congrès peut se faire de diverses façons : tables rondes, exposés de politiques innovatrices, de nouvelles expériences et initiatives ou encore, présentations de résultats de recherches. Cette année, nous nous intéressons aux sujets suivants : l'inclusion sociale, la pauvreté chez les enfants, l'agenda urbain, les politiques autochtones, la gouvernance (qui fait quoi et à quel niveau), le développement social des régions, les voisinages, les méthodes d'évaluation et le développement social ainsi que les mesures de qualité de vie.

La date limite pour la remise des propositions a été prolongée jusqu'au 6 janvier 2003. Celles-ci doivent indiquer le thème choisi, accompagné du titre et d'un bref résumé d'environ 250 mots de la présentation proposée ainsi que d'un court c.v. de l'auteur. Votre proposition doit être envoyée à socconf@uottawa.ca ou encore à :
Caroline Andrew
Congrès sur les politiques sociales canadiennes
Faculté des sciences sociales, Université d'Ottawa
Ottawa, ON K1N 6N5

Pour de plus amples renseignements, veuillez vous adresser à l'adresse suivante : socconf@uottawa.ca ou contacter Céline Widmer au (613) 562-5800 (1854)