ORIGINAL PAPER



# Ko-Pamoja: the feasibility of a lay health educator-led breast and cervical screening program for Black women in Ontario, Canada (short report)

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#### Abstract

*Background* Effective strategies are needed to actively encourage Black women in Canada to adhere to breast and cervical cancer screening and follow-up. In this study, we describe "Ko-Pamoja," a pilot peer education program for breast and cervical cancer screening targeted specifically at Black women in Toronto, Canada.

*Methods* We used an Afrocentric lens to design the program, whose purpose was to increase awareness of cancer susceptibility and the benefits of screening for breast and cervical cancer for Black women. Participants were recruited through three Black-predominant churches. We used pre- and post-session questionnaires to assess changes in participant awareness of cancer susceptibility and screening guidelines, and changes in screening selfefficacy.

*Results* 30 women attended sessions. Ko-Pamoja was able to increase awareness of cancer susceptibility, awareness of screening guidelines, and screening self-efficacy. Two

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months after the last session, four women had been screened for breast cancer at a participating mammogram site.

*Conclusions* Building on the successes of Ko-Pamoja, future versions are being developed in the region. These versions will be adapted to take into account our lessons learned while maintaining the Afrocentric lens and community-focussed approach, in order to promote cancer screening and ultimately improve outcomes.

**Keywords** Cancer screening · Peer education · Black Canadian · Health promotion

### Background

Screening for breast and cervical cancer is well established in Canada, with provincial-level organized screening programs in Ontario, Canada's largest province by population [1]. However, certain sociodemographic groups in Ontario are less likely to be screened. For example, immigrant women from Sub-Saharan Africa have been found to have lower rates of breast and cervical cancer screening than Canadian-born women [2, 3]. While race-based data are rarely collected in Canada, data from the American Cancer Society suggest that African-American women have 41% higher breast cancer mortality than White women [4]. Further, data from the UK suggest that Black British women have poorer breast cancer survival than White women and are at higher risk of developing cervical cancer [5]. Taken together, these findings suggest that effective strategies are needed to actively encourage Black women in Canada to adhere to breast and cervical cancer screening and follow-up.

Ethnoculturally specific lay health educator programs have previously been used successfully to promote cancer screening [6-12]. In the US, lay health educators have long been used in African-American communities to promote cancer screening [13–22], but to our knowledge similar programs for Canada's Black community have not yet been implemented. As the social and historical context of Black Canadian communities differs from that of their African-American counterparts, it would not be feasible to directly apply a US-based educator program to Black Canadians and anticipate the same results. For example, there is generally universal access to health care in Canada, and many Black Canadians are immigrants or first-generation Canadians [23]. In this short report, we describe the implementation and evaluation of "Ko-Pamoja," a pilot peer education program for breast and cervical cancer screening informed by and targeted specifically at Black women in Toronto, Ontario, Canada.

#### Methods

#### Context

According to Statistics Canada's 2011 National Household Survey, Blacks are the third largest visible minority group in Canada, and more than half (53.1%) of Black Canadians are foreign-born [24]. The top ancestral origins among Black Canadians were noted to be Jamaican (22.8%), Haitian (13.9%), Somali (4.4%), and Trinidadian (3.7%). Only 8.9% reported being third-generation Canadian or more, and 42.0% of Black Canadians live in Toronto.

#### **Program name**

Ko-Pamoja is not a pre-existing word, but a new word that was created for this new program, the first of its kind that we know of in Canada. "Ko" is a Yoruba (West African) word meaning "to learn" and "Pamoja" is a Swahili (East African) word meaning "together." Thus, Ko-Pamoja denotes a pan-African spirit of learning together as a community.

#### **Program development**

Using an Afrocentric lens, we designed Ko-Pamoja, a peer education program whose purpose was to increase awareness of cancer susceptibility and the benefits of screening for breast and cervical cancer for Black women. TAIBU Community Health Centre (CHC), a Black-focussed health clinic in the Malvern area of Ontario (east of Toronto), was the home base for the Ko-Pamoja program. Malvern has a high proportion of immigrants and has been identified by the City of Toronto as an "at-risk" neighborhood due to its higher-than-average degree of social need and poorer access to social services [25]. Two volunteer community members were recruited from TAIBU community programs to serve as the lay health educators that led the education sessions. These women had to live in the area, be within the target age for the program, and attend local churches, so that they would be representative of the populations we would be engaging. The two lay health educators received training from a member of the research team and a health education specialist, both Black women. Through 7 h of training, the educators (i) received an overview of the Transtheoretical Model (TTM) 'Stages of Change' theory and the behaviors associated with each stage [26], (ii) learned to identify where peers were on the behavioral change continuum, (iii) learned to identify behavior exhibited at each TTM stage, and (iv) learned how to assess an individual stage on the behavioral change continuum and increase their perception as to how to engage with a member of the public at each stage (including when not to). It was emphasized to the lay health educators that if participants were in the pre-contemplation stage, i.e., not intending to take action in the foreseeable future [26], then they should acknowledge where the participants were without judgment and focus their energies on other participants. Lay health educators were also taught how to adapt their approach and language as needed, were given the opportunity to role-play during their training, and were counseled on how to refer women who had questions that were beyond their scope to answer.

The Ko-Pamoja program itself was developed by the research team and the health education specialist. It consisted of a single session that was delivered on multiple occasions to different groups of women. Each two-hour session began with an explicit discussion about ground rules to establish a safe learning environment. The session then discussed "The Big C"; participants were asked what they knew about cancer and myths were addressed. Participants were educated on basic female anatomy and function. Next, the session delved into education about breast and cervical cancer specifically, the known benefits of screening, and what test results mean. This component of the session included several videos, one of which described the process of a mammogram in detail and one of which was a testimonial from a Black woman who had experienced breast cancer (see http://www.herconline.ca/ videos/). The session concluded with a discussion on common barriers to screening from the perspective of immigrant and racialized women. An anonymous question box was also made available to allow the lay health educators to address any issue or questions that participants might feel uncomfortable vocalizing. A study investigator attended the first session for quality control purposes.

Participants were provided with dinner and round trip public transportation tickets. From a community-based approach, we believed that these provisions were crucial to be sensitive to socioeconomic challenges that are prevalent in the region.

#### **Participant recruitment**

The research team members recruited participants through three predominantly Black churches that all had pre-existing relationships with TAIBU CHC. Team members spoke to the congregations at two churches and at one wellness event held at the third church. Sign-up lists were passed around for women who were interested to provide their contact information (specifically name and telephone number). They were then called to book a session date. Although our target audience was Black women aged 40-69 years living in Malvern, no firm inclusion/exclusion criteria were set for session attendees, as we did not want to exclude any women willing to learn more about cancer screening and who could potentially share this information with others.

#### **Program evaluation**

To evaluate the Ko-Pamoja program, we used pre- and post-session questionnaires to assess changes in participant awareness of cancer susceptibility and screening guidelines, and changes in screening self-efficacy (Appendix). Questionnaires were distributed immediately before and after each session. Prior to the start of the program, individuals were informed of their right to withdraw from the program at any time and their right to decline to participate in any part of the session that made them experience discomfort without any penalties. Participants verbally consented their willingness to partake in the program prior to the start of Ko-Pamoja.

Participants were also given a voucher at the end of the session that identified them as having participated in Ko-Pamoja. They were asked to take it to participating local mammography sites if they chose to get screened for breast cancer, where they would then receive a gift basket. Participating mammography sites provided the research team with the number of vouchers returned to them but vouchers could not be linked to individual women in an identifiable manner.

The study was approved by the Research Ethics Board at St. Michael's Hospital.

#### Analysis

Descriptive analyses were used to describe basic demographics of study participants and survey responses. To compare changes in responses on the pre- and post-intervention questionnaires, paired t tests were performed at the 0.05 level of significance, two-tailed. All statistical analyses were performed using Minitab Statistical Software, version 16.

We also received aggregate data about the number of program attendees who turned in the voucher from participating mammography sites two months after the conclusion of the last session.

#### **Knowledge dissemination**

A community town hall was held two months after the last session at TAIBU CHC to share the findings with the broader community and with other potential stakeholders. Invitees included local residents and politicians, as well as representatives from public health units and other CHCs. During and after the town hall, plans were initiated to develop and implement "Ko-Pamoja 2.0" at both TAIBU and other CHCs in the Greater Toronto Area that serve the Black community.

# Results

#### Study recruitment and sample

Eighty women signed up at the three different recruitment events to participate in Ko-Pamoja. However, women were very difficult to get a hold of by telephone for booking sessions, and ultimately only 30 women attended sessions. Table 1 describes the number of women who confirmed for and attended each session. A total of 7 sessions were held with attendance varying from 2 to 9 women per session from October to December 2015. In sessions #4 and #5, the number of women who attended was higher than the number who confirmed, as women brought along peers, but for most other sessions there were no-shows. Session #2, where only 2 of 10 confirmed women attended, was a day with inclement weather.

 Table 1
 Number of women who confirmed and attended 7
 Ko-Pamoja sessions

Session	# Confirmed	# Who attended
1	4	4
2	10	2
3	7	5
4	4	8
5	3	9
6	Missing	2
7	4	2

Table 2	Demographic	characteristics	of the 3	30 women	who	attended
7 Ko-Par	moja sessions					

	n (%)
Age in years	
<40	1 (3.3)
40–49	8 (26.7)
50–59	6 (20.0)
60–69	12 (40.0)
70+	3 (10.0)
Missing	0 (0)
Cultural and racial background	
Black & Portuguese	1 (3.3)
Black African	1 (3.3)
Black Canadian	1 (3.3)
Black Caribbean	26 (86.7)
Canadian	1 (3.3)
Missing	0 (0)
Highest level of education	
Less than high school	1 (3.3)
High school	3 (10.0)
College/university	22 (73.3)
Graduate school/professional degree	2 (6.7)
Missing	2 (6.7)

Demographic characteristics of the 30 participants are summarized in Table 2. Most (86.7%) participants were between 40 and 69 years of age. Most (86.7%) identified as being Black Caribbean, and the majority (80.0%) had postsecondary education. Nineteen participants (63.3%) reported being up-to-date on mammograms and 21 (70.0%) reported being up-to-date on Pap testing prior to attending the session.

#### Change in awareness of cancer susceptibility

Pre- and post-session changes in awareness of cancer susceptibility are reported elsewhere [27]. Briefly, there was a general increase in awareness of risk factors for breast and cervical cancer, but some women erroneously believed that there was a vaccine for breast cancer and some incorrectly identified cervical cancer risk factors post-session [27]. For example, 14 women thought that obesity was a risk factor for cervical cancer prior to the session, and this jumped to 26 women after the session.

#### Change in awareness of screening guidelines

Seventeen respondents knew prior to the session that screening mammograms should occur every two years and this increased to 22 post-session (Table 3). Of women who provided paired responses, 32.1% showed a positive change (i.e., answered the question incorrectly prior to the session but subsequently provided a correct response), and 7.1% showed a negative change. Six respondents knew prior to the session that screening Pap tests should be done every three years and this increased to 15 post-session (Table 3). Of women who provided paired responses, 58.8% showed a positive change and 5.9% showed a negative change.

### Change in screening self-efficacy

Change in self-efficacy is reported elsewhere [27]. Briefly, of women overdue for screening and not planning to be screened prior to the session, 80% (breast) and 100% (cervical) were planning to be screened after the session.

#### Screening uptake

Two months after the last session, four vouchers had been turned in at a participating mammography site.

# Discussion

To our knowledge, this is the first pilot peer education program for breast and cervical cancer screening targeted toward Black women in Canada. The Ko-Pamoja program was developed with an Afrocentric lens and a communitycentered approach, with a focus on knowledge dissemination for sustainability. It was situated in a high-needs community to maximize potential benefits. Through a preand post-session evaluation, we have shown that Ko-Pamoja was able to increase the number of attendees who were aware of screening guidelines and to increase women's awareness of risk factors. Additionally, almost all of the overdue women who had reported before the session that they had no plans to screen had changed their minds by the end of the session. Two months after the last session, four women had been screened for breast cancer and it is feasible that more were screened in subsequent months and/or at other sites, and that some attendees went on to get screened for cervical cancer.

Despite these successes, there were also several challenges to the program. First, only approximately one-third of women who signed up for sessions actually attended. This high no-show rate may have been because the sessions were held at TAIBU CHC, a site that might have been unfamiliar to many women. Greater uptake might have occurred if sessions had been held at participating churches. For example, similar lay educator cancer screening/ prevention programs that have been based within hair salons and churches have been successful [15–18, 20–22], suggesting that meeting women in a familiar and

Tuble e change in an areness of servering gardenne.	Table 3	Change in	awareness	of screening	guidelines
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n (%)	Number pre- education <sup>a</sup>	Number post- education <sup>a</sup>	Number of paired responses	Positive change (i.e. change to correct response) <sup>b</sup>	Negative change (i.e. change to incorrect response) <sup>b</sup>	No change <sup>b</sup>
Aware that breast cancer screening should occur every 2 years	17/30 (56.7%)	22/29 (75.9%)	28	9 (32.1%)	2 (7.1%)	17 (60.7%)
Aware that cervical screening should occur every 3 years	6/28 (21.4%)	15/21 (71.4%)	17	10 (58.8%)	1 (5.9%)	6 (35.3%)

<sup>a</sup> Not all women answered all questions pre- and post-sessions. Denominators were the number of respondents to the question

<sup>b</sup> Denominator is the number of paired responses

comfortable space might be more appropriate. Timing of sessions may have also played a role. Sessions were held in the fall and winter months, and it is possible that attendance would have been higher in the spring and summer when weather is warmer and less likely to pose a driving/transit risk, and when days are longer.

Second, the majority of attendees reported being up-todate on cervical and breast cancer screening. By its voluntary nature, the program may attract women who are already engaged in their health and have higher health literacy. We were unable to ascertain if the four women who turned in coupons were women who were overdue for breast cancer screening, or if they were women who would have proceeded with screening regardless of attending Ko-Pamoja. Tellingly, 80% of women had post-secondary education. Creative ways may be needed to engage harderto-reach women in this and similar endeavors.

Third, a small proportion of women exhibited negative changes in their responses. We hypothesize that this might be due to combining breast and cervical cancer screening into one session, which might have been too much information for women to digest at once. Future iterations of Ko-Pamoja will provide education on breast and cervical cancer screening separately and be presented in multiple sessions. Fourth, the vast majority of participants were from the Caribbean community. However, immigrants from Sub-Saharan Africa have been highlighted as an under-screened group [2], and more efforts will be needed to target these women, perhaps through culturally specific events and venues.

Building on the successes of Ko-Pamoja, and learning from the limitations noted above, future versions are being developed at several CHCs in the region. These versions will be adapted based on the lessons learned from the initial Ko-Pamoja program while maintaining the Afrocentric lens and community-focussed approach, in order to promote cancer screening and ultimately improve outcomes.

#### Compliance with ethical standards

**Conflicts of interest** The authors have no conflicts of interest to declare. The study was approved by the Research Ethics Board at St. Michael's Hospital. Consent to participate in the study was implied by completion of study questionnaires. All procedures performed in this study were in accordance with the ethical standards of the institutional research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards. This study was funded by a granting agency (Women's Xchange program) at Women's College Hospital that is funded by the Ontario Ministry of Health and Long-Term Care's Health System Research Fund.

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# Appendix

# **Ko-Pamoja Pre-session Questionnaire**

Thank you for your participation in this session. Completion of this survey is optional and your answers will be kept anonymous. You can also skip any question that you do not want to answer.

1. What is your age?	
Less than 40 years old	🗖 55-59 years old
□ 40-44 years old	🗖 60-64 years old
□ 45-49 years old	🗖 65-69 years old
□ 50-54 years old	□ 70 years or older

# 2. How would you best describe your cultural and racial background? (Please check one)

- Black African □ Black West Indian (Caribbean) South Asian (e.g. East Indian, Pakistani, Sri Lankan)
- East Asian (e.g. Chinese) □ Other (Please specify: \_\_\_\_\_ )

# 3. What is your highest level of education? (Please check one)

- Less than high school/secondary school □ University □ High school/secondary school Graduate school or professional degree □ College
- 4. A mammogram is an x-ray picture of your breast to look for early signs of breast cancer, where your breast is briefly squeezed between two plates attached to a mammogram machine. When did you last have a mammogram? (Please check one)

□ Never	□ 2 years ago or less (If you select this, skip
□ More than 2 years ago	Questions 5 & 6 and go to Question 7.)

- 5. If you have never had a mammogram OR it has been more than 2 years since your last mammogram, what are the reasons why? (Check ALL that apply)
- □ I do not feel that I need a mammogram
- □ I did not know that I could get a mammogram
- □ My doctor has never mentioned it to me
- □ My doctor said that I do not need a mammogram right now
- □ I am worried that a mammogram may be painful
- □ I am worried about what the result might be

- □ I do not have time to go
- □ I am embarrassed about how this test is done
- □ I forgot to go
- □ I do not know where to go
- □ I cannot get information in the language I prefer
- □ Other (Please specify: \_\_\_\_\_

6. Are you planning to get a mam	mogram? (Please c	heck one)
□ Yes, within the next 3 months		□ No (Why not:
□ Yes, within the next 6 months □ Yes, within the next 12 months		)
$\Box$ I am not sure		
□ I want talk to my doctor about it		)
7. Would you feel confident expla check one)	ining to a friend w	hy it is important to get a mammogram? (Please
□ Yes	□ Somewhat	□ No
<ul> <li>B. Do you know how often a wom</li> <li>□ Every year</li> <li>□ Every 2 years</li> <li>□ Every 3 years</li> </ul>	an should get a ma	mmogram? (Please check one) Every 5 years Other (Please specify:)
9. Do you know where you can go □ Yes	o to get a mammogr	am? (Please check one) □ No
10. A pap smear is a test where a h abnormal cell changes on your a pap smear? (Please check on	ealth care provide cervix that might i e)	r inserts a speculum into your vagina to look for epresent cervical cancer,. When did you last have
□ Never □ More than 3 years ago		$\Box$ 3 years ago or less (If you select this, skip Questions 10 & 11 and go to Question 12 )
<ul> <li>11. If you have never had a pap sm what are the reasons why? (Ch</li> <li>I do not feel that I need a pap smea</li> <li>I did not know that I could get a pa</li> <li>My doctor has never mentioned it</li> <li>My doctor said that I do not need a right now</li> <li>I am worried that a pap smear may</li> <li>I am worried about what the result</li> </ul>	ear OR it has been eck ALL that apply ar ap smear to me a pap smear y be painful t might be	more than 3 years since your last pap smear, I do not have time to go I am embarrassed about how this test is done I forgot to go I do not know where to go I cannot get information in the language I prefer Other (Please specify:)
<ul> <li>12. Are you planning to get a pap s</li> <li>□ Yes, within the next 3 months</li> <li>□ Yes, within the next 6 months</li> <li>□ Yes, within the next 12 months</li> <li>□ I am not sure</li> <li>□ I want talk to my doctor about it</li> </ul>	mear? (Please cheo	ck one)      □ No (Why not:)      □ Other (Please explain:)     )

# 13. Would you feel confident explaining to a friend why it is important to get a pap smear? (Please check one)

check onej			
🗆 Yes	□ Somewhat	🗆 No	
14. Can you describe	the test for cervical cancer? (Please check one)		
□ Yes	□ No		

15. Do you know how often a woman should get a pap smear? (Please check one)				
Every year	Every 5 years			
Every 2 years	□ Other (Please specify:			
Every 3 years	)			

# For each of the following questions, check if you think the statement is TRUE (T) or FALSE (F):

# 16. Do these factors place a woman at risk for breast cancer?

- a) Family history of breast cancer  $\Box T \Box F$
- b) A specific "breast cancer gene"  $\Box T \ \Box F$
- c) Dense breasts  $\Box T \Box F$
- d) Number of sexual partners  $\Box T \Box F$
- e) Number of children  $\Box T \Box F$

- f) The birth control pill ("The Pill") and hormone replacement therapy □T □F
- g) Alcohol  $\Box T \Box F$
- h) Obesity  $\Box T \Box F$

17. There is a vaccine that can reduce a woman's chances of getting breast cancer.  $\Box T \ \Box F$ 

18. A mammogram is the most reliable method for finding breast cancer.  $\Box T \ \Box F$ 

# 19. If you do have breast cancer, it is more likely to be detected if you have regular screening. DT

20. If I am 50 years or older I can go to a breast cancer screening site and get a mammogram without a doctor's note. □T □F

# 21. Do these factors place a woman at risk for cervical cancer?

- a) A specific "cervical cancer gene"  $\Box T \Box F$
- b) HPV (human papillomavirus) infection□T □F
- c) Number of sexual partners  $\Box T \Box F$

- d) Number of children  $\Box T \Box F$
- e) Alcohol □T □F
- f) Obesity  $\Box T \Box F$

# 22. There is a vaccine that can reduce a woman's chances of getting cervical cancer. $\Box T \ \Box F$

# 23. Treatment for cervical cancer is most effective when cancer is caught early. $\Box T \ \Box F$

Thank you for completing this survey! We would appreciate if you would complete a survey after the session is finished as well.

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# **Ko-Pamoja Post-session Questionnaire**

Thank you for your participation in this session. Completion of this survey is optional and your answers will be kept anonymous. You can also skip any question that you do not want to answer.

# For each of the following questions, check if you think the statement is TRUE (T) or FALSE (F):

# 1. Do these factors place a woman at risk for breast cancer?

- a) Family history of breast cancer  $\Box T \Box F$
- b) A specific "breast cancer gene"  $\Box T \Box F$
- c) Dense breasts  $\Box T \Box F$
- d) Number of sexual partners  $\Box T \Box F$
- e) Number of children  $\Box T \Box F$

- f) The birth control pill ("The Pill") and hormone replacement therapy □T □F
- g) Alcohol □T □F
- h) Obesity  $\Box T \Box F$
- 2. There is a vaccine that can reduce a woman's chances of getting breast cancer.  $\Box T \ \Box F$
- 3. A mammogram is the most reliable method for finding breast cancer.  $\Box T \ \Box F$
- 4. If you do have breast cancer, it is more likely to be detected if you have regular screening.  $\Box T \ \Box F$
- 5. If I am 50 years or older I can go to a breast cancer screening site and get a mammogram without a doctor's note. □T □F
- 6. Do these factors place a woman at risk for cervical cancer?
  - j) Number of children  $\Box T \Box F$
  - k) Alcohol □T □F
  - l) Obesity  $\Box T \Box F$

i) Number of sexual partners  $\Box T \Box F$ 

 $\Box T \Box F$ 

g) A specific "cervical cancer gene" □T □Fh) HPV (human papillomavirus) infection

- 7. There is a vaccine that can reduce a woman's chances of getting cervical cancer.  $\Box T \ \Box F$
- 8. Treatment for cervical cancer is most effective when cancer is caught early.  $\Box T \ \Box F$

After attending this session...

9. Do you feel confident explainin	g to a friend why it	is important to get a mammogram? (Please
□ Yes	□ Somewhat	□ No
<b>10. Do you know how often a wom</b> ☐ Every year ☐ Every 2 years ☐ Every 3 years	an should get a mar	nmogram? (Please check one)
<b>11. Do you know where you can go</b> □ Yes (If No: What other information do yo	<b>to get a mammogr</b> a u need?	am? (Please check one) □ No )
12. If you have NOT had a mammog plan to get one now? (Please ch	gram or it has been leck one; if you hav	more than 2 years since your last one, do you e had a mammogram in the last 2 years, skip to
Question 16.)  Yes, within the next 3 months Yes, within the next 6 months Ves, within the next 12 months		□ No (Why not:)
<ul> <li>I am not sure</li> <li>I want talk to my doctor about it</li> </ul>		)
13. Do you feel confident explainin	g to a friend why it	is important to get a pap smear? (Please check
<ul> <li>13. Do you feel confident explainin one)</li> <li>□ Yes</li> </ul>	g to a friend why it □ Somewhat	is important to get a pap smear? (Please check □ No
<ul> <li>13. Do you feel confident explaining one)</li> <li>□ Yes</li> <li>14. Can you describe the test for ceeees</li> <li>□ Yes</li> <li>(If No: What other information do you)</li> </ul>	g to a friend why it Somewhat Somewhat Some the set of the set	is important to get a pap smear? (Please check No ase check one) No
<ul> <li>13. Do you feel confident explaining one)</li> <li>Yes</li> <li>14. Can you describe the test for ceee Yes</li> <li>Yes</li> <li>(If No: What other information do you</li> <li>15. Do you know how often a woma</li> <li>Every year</li> <li>Every 2 years</li> <li>Every 3 years</li> </ul>	g to a friend why it Somewhat Somewhat Servical cancer? (Plesson u need? an should get a pap	is important to get a pap smear? (Please check INO Ase check one) NO Smear? (Please check one) Every 5 years Other (Please specify:
<ul> <li>13. Do you feel confident explaining one)</li> <li>Yes</li> <li>14. Can you describe the test for ceee Yes</li> <li>Yes</li> <li>(If No: What other information do you</li> <li>15. Do you know how often a woman Every year</li> <li>Every 2 years</li> <li>Every 2 years</li> <li>Every 3 years</li> <li>16. If you have NOT had a pap smeat to get one now? (Please check of 17)</li> </ul>	g to a friend why it Somewhat rvical cancer? (Plea u need? an should get a pap ar or it has been mo one; if you have had	is important to get a pap smear? (Please check INO See check one) INO Semear? (Please check one) Every 5 years Other (Please specify:)  re than 3 years since your last one, do you plan a pap smear in the last 2 years, skip to Question
<ul> <li>13. Do you feel confident explaining one)</li> <li>Yes</li> <li>14. Can you describe the test for ceee Yes</li> <li>Yes</li> <li>(If No: What other information do you the second of the seco</li></ul>	g to a friend why it Somewhat Somewhat rvical cancer? (Ple: u need? an should get a pap ar or it has been mo one; if you have had	is important to get a pap smear? (Please check
<ul> <li>13. Do you feel confident explaining one)</li> <li>Yes</li> <li>14. Can you describe the test for ceed of Yes</li> <li>15. Do you know how often a wome of Yes</li> <li>15. Do you know how often a wome of Yes</li> <li>Every year</li> <li>Every 2 years</li> <li>Every 3 years</li> <li>16. If you have NOT had a pap smear to get one now? (Please check of 17.)</li> <li>Yes, within the next 3 months</li> <li>Yes, within the next 12 months</li> <li>I am not sure</li> </ul>	g to a friend why it Somewhat rvical cancer? (Plea u need? an should get a pap ar or it has been mo one; if you have had	is important to get a pap smear? (Please check

# We would like your opinion about the session overall. This feedback will allow us to make improvements in the future. Please select your level of agreement with each of the following statements by placing a checkmark ( $\checkmark$ ) in the appropriate box:

	Strongly Agree	Agree	No opinion	Disagree	Strongly Disagree
17. The session was well-organized.					
18. My questions about breast and cervical cancer screening were adequately answered.					
19. The location this session was held at was suitable.					
20. The length of the session was appropriate.					
21. The peer educators did a great job.					
22. I would recommend this session to a friend.					

# 23. What did you enjoy most about today's session? \_\_\_\_\_\_

# 24. One thing I learned today is: \_\_\_\_\_

25. Do you have any suggestions for how the session could be improved?

Thank you for completing this survey and for joining us today!

# References

- Cancer Care Ontario. Screening—CCO. http://www.cancercare. on.ca/pcs/screening/. Accessed 21 Feb 2017
- Lofters AK, Hwang SW, Moineddin R, Glazier RH (2010) Cervical cancer screening among urban immigrants by region of origin: a population-based cohort study. Prev Med 51(6):509–516
- 3. Vahabi M, Lofters A, Kumar M, Glazier RH (2016) Breast cancer screening disparities among immigrant women by world region

of origin: a population-based study in Ontario, Canada. Cancer Med  $5(7){:}1670{-}1686$ 

- 4. Cancer Facts & Figures for African Americans 2013–2014 Atlanta: American Cancer Society (2013) http://www.cancer.org/ acs/groups/content/@epidemiologysurveilance/documents/docu ment/acspc-036921.pdf. Accessed 21 Feb 2017
- Cancer Incidence and Survival By Major Ethnic Group, England, 2002–2006. Cancer Research UK, London. http://publications. cancerresearchuk.org/downloads/product/CS\_REPORT\_INCSURV\_ ETHNIC.pdf. Accessed 21 Feb 2017

- Han HR, Lee H, Kim MT, Kim KB (2009) Tailored lay health worker intervention improves breast cancer screening outcomes in non-adherent Korean-American women. Health Educ Res 24(2):318–329
- Fernandez ME, Gonzales A, Tortolero-Luna G, Williams J, Saavedra-Embesi M, Chan W et al (2009) Effectiveness of Cultivando la Salud: a breast and cervical cancer screening promotion program for low-income Hispanic women. Am J Public Health 99(5):936–943
- Dunn SF, Lofters AK, Ginsburg OM, Meaney CA, Ahmad F, Moravac MC et al (2017) Cervical and breast cancer screening after CARES: a community program for immigrant and marginalized women. Am J Prev Med 52(5):589–597
- Tong EK, Nguyen TT, Lo P, Stewart SL, Gildengorin GL, Tsoh JY et al (2017) Lay health educators increase colorectal cancer screening among Hmong Americans: a cluster randomized controlled trial. Cancer 123(1):98–106
- Thompson B, Vilchis H, Moran C, Copeland W, Holte S, Duggan C (2014) Increasing cervical cancer screening in the United States-Mexico border region. J Rural Health 30(2):196–205
- Larkey LK, Herman PM, Roe DJ, Garcia F, Lopez AM, Gonzalez J et al (2012) A cancer screening intervention for underserved Latina women by lay educators. J Womens Health (Larchmt). 21(5):557–566
- Hansen LK, Feigl P, Modiano MR, Lopez JA, Escobedo Sluder S, Moinpour CM et al (2005) An educational program to increase cervical and breast cancer screening in Hispanic women: a Southwest Oncology Group study. Cancer Nurs 28(1):47–53
- Giarratano G, Bustamante-Forest R, Carter C (2005) A multicultural and multilingual outreach program for cervical and breast cancer screening. J Obstet Gynecol Neonatal Nurs 34(3):395–402
- Patel K, Ukoli F, Liu J, Beech D, Beard K, Brown B et al (2013) A community-driven intervention for prostate cancer screening in African Americans. Health Educ Behav. 40(1):11–18
- Weinrich SP, Boyd MD, Weinrich M, Greene F, Reynolds WA Jr, Metlin C (1998) Increasing prostate cancer screening in African American men with peer-educator and client-navigator interventions. J Cancer Education 13(4):213–219
- Sadler GR, Ko CM, Wu P, Alisangco J, Castaneda SF, Kelly C (2011) A cluster randomized controlled trial to increase breast cancer screening among African American women: the black cosmetologists promoting health program. J Natl Med Assoc 103(8):735–745

- Wood RY, Duffy ME, Morris SJ, Carnes JE (2002) The effect of an educational intervention on promoting breast self-examination in older African American and Caucasian women. Oncol Nurs Forum 29(7):1081–1090
- 18. Linnan LA, Ferguson YO, Wasilewski Y, Lee AM, Yang J, Solomon F et al (2005) Using community-based participatory research methods to reach women with health messages: results from the North Carolina BEAUTY and Health Pilot Project. Health Promot Pract 6(2):164–173
- Drake BF, Shelton RC, Gilligan T, Allen JD (2010) A churchbased intervention to promote informed decision making for prostate cancer screening among African American men. J Natl Med Assoc 102(3):164–171
- Boehm S, Coleman-Burns P, Schlenk EA, Funnell MM, Parzuchowski J, Powell IJ (1995) Prostate cancer in African American men: increasing knowledge and self-efficacy. J Community Health Nurs 12(3):161–169
- Weinrich S, Holdford D, Boyd M, Creanga D, Cover K, Johnson A et al (1998) Prostate cancer education in African American churches. Public Health Nurs 15(3):188–195
- 22. Darnell JS, Chang CH, Calhoun EA (2006) Knowledge about breast cancer and participation in a faith-based breast cancer program and other predictors of mammography screening among African American women and Latinas. Health Promot Pract 7(3 Suppl):201S–212S
- 23. People from Countries Where HIV is Endemic—Black People of African and Caribbean Descent Living in Canada. Public Health Agency of Canada; 2010
- Immigration and Ethnocultural Diversity in Canada: Statistics Canada (2016) http://www12.statcan.gc.ca/nhs-enm/2011/as-sa/ 99-010-x/99-010-x2011001-eng.cfm. Accessed 21 Feb 2017
- 25. Final Report on the Use of Community Engagement Funds: Black Health Alliance. http://blackhealthalliance.ca/PDF/Black Health Alliance Community Engagement Final Report - TAIBU \_Mal vern CHC.pdf. Accessed 21 Feb 2017
- Prochaska JO, Velicer WF (1997) The transtheoretical model of health behavior change. Am J Health Promot 12(1):38–48
- Nnorom O, Lofters A, Jain A, Lee-Foon N, Scott F (2016) Ko-Pamoja: Learning Together About Breast and Cervical Cancer. Health Equity Research Collaborative, Toronto