Communication-based strategies to eliminate health disparities in diverse populations

Institute for Health Research and Policy Distinguished Lecture
Pfizer Visiting Professorship of Clear Health Communication

April 8, 2009

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Washington University in St. Louis
St. Louis, MO
Health is not a primary value.
LIVE YOUR OWN ADVENTURE
Some common terminal values

- Being respected
- A comfortable life
- Sense of belonging
- Power or influence
- Family security
- Happiness
- Excitement
- Freedom
Selected instrumental values

- Ambitious
- Organized
- Dependable
- Loyal

- Hard working
- Honest
- Rebellious
- Spiritual
If a woman says… “I rely on God to keep me in good health”

We tell her… “The Lord has given us a powerful tool to find breast cancer when it can still be treated effectively…”
1,227 African American women ages 18-65

Usual Care

Behavioral determinants

Cultural values

Behavior + culture

1-, 6- and 18-month follow-up (72% final retention)
Behavioral tailoring
Theory-based determinants

- Stage of change
- Self-efficacy
- Perceived risk
- Benefits and barriers
- Knowledge and beliefs
Cultural tailoring
Four key values

• Racial pride
• Collectivism
• Time orientation
• Religiosity/spirituality
A Little Action Now Prevents Big Problems Later

A pulled thread on your favorite sweater. A snag tear in your favorite skirt. A small cut not bothering you. What do
these things have in common? They are all easy to overlook,
but if you don't take care of them, they can get worse.

Breast cancer is the same way. It could be quietly growing in
your body without you feeling a thing.

The good news is that these things—indicating breast
cancer—together a little action now can save the whole thing.

75 Years

Twenty-five years, she's been a lifeline for her mother. She's worked long and hard and
succeeded for those that were once her children, her
friends. All the people—young and old—have gathered in her
Amelia's, her love...now long gone. Twenty-five years.
She loves and makes, as one who was, her home and her
world. She feels loved and many more.

Years later.

Reading this news, we are reminded of this story. We
think of them, now they have cancer. For
many of us, rising over our shoulders is an
unbearable obligation and a love of love. For
all of us, we can never repay the care given us.

75 years. Many, many more.

Powerfully," she says. "We have
now every year for the life. Now that's
true.

Friedman's

A manogram can help save your life!

Be sure to take pictures of the soft tissues of the breast.

The radiation used is about the same as that used for a dental x-ray.

The x-rays produce black and white images of the breast on
plates of a x-ray film.

Because every woman's breasts are different, x-rays are difficult to read. An radiologist (especially interned doctors) examine the film
for anything that might be a problem.

Your first mammogram is recommended at the baseline x-ray.

About Your Health

Mammograms: How They Work

Get regular mammograms. A mammogram can help save your life!

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for anything that might be a problem.
Getting a mammogram
18-month follow-up (n=192; OR=2.6)

% 40+ reporting mammogram in last 12 months

Percent

Usual care 54.5
Behavioral 64.6
Cultural 63.6
Behav + Cult 75.6

Fruit and vegetable consumption
18-month follow-up (n = 599; p < .05)

women <40, mean change in FV servings per day

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Change in servings per day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Usual care</td>
<td>0.59</td>
</tr>
<tr>
<td>Behavioral</td>
<td>0.43</td>
</tr>
<tr>
<td>Cultural</td>
<td>0.25</td>
</tr>
<tr>
<td>Behav + Cult</td>
<td>0.96</td>
</tr>
</tbody>
</table>

Be strategic in choosing settings.
St. Louis, MO
Percentage African American population by census tract, 2000
St. Louis, MO

Incidence of late-stage breast cancer 2X expected rates for MO, by census tract
Research questions
Reach and specificity

Which community settings…

1. Have the highest rates of kiosk use?
2. Reach users with the greatest need?
3. Have the most geographically localized reach?
Have you ever had a mammogram?

Yes  no
Reflections of You

skin secrets
inspiration from the stars

myth or fact?
what you need to know about breast cancer and mammograms
Mean kiosk use per day
By community setting (n = 12,643; \( p < .001 \))

<table>
<thead>
<tr>
<th>Setting</th>
<th>Mean Uses per Kiosk Day</th>
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</thead>
<tbody>
<tr>
<td>Beauty salons</td>
<td>6.3</td>
</tr>
<tr>
<td>Churches</td>
<td>7.3</td>
</tr>
<tr>
<td>Social service</td>
<td>9.2</td>
</tr>
<tr>
<td>Libraries</td>
<td>10.3</td>
</tr>
<tr>
<td>Health centers</td>
<td>12.9</td>
</tr>
<tr>
<td>Laundromats</td>
<td>18.8</td>
</tr>
</tbody>
</table>

Ever had a mammogram? (40+)
By community setting (n = 2,607; p < .001)

- Beauty salons: 80.6%
- Churches: 85.2%
- Social service: 65.8%
- Libraries: 60.8%
- Health centers: 72%
- Laundromats: 47.9%

Up-to-date on mammograms? (40+)
By community setting (n = 2,607; \( p < .001 \))

Know where to get a mammogram?
By community setting (n = 2,607; p < .001)

Percent

Beauty salons: 87.8%
Churches: 86.6%
Social service: 76.7%
Libraries: 71.2%
Health centers: 81.8%
Laundromats: 58.9%

Is transportation a barrier?
By community setting (n = 2,607; p < .001)

<table>
<thead>
<tr>
<th>Setting</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beauty salons</td>
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<tr>
<td>Churches</td>
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<tr>
<td>Social service</td>
<td>23.3</td>
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<tr>
<td>Libraries</td>
<td>31.3</td>
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<tr>
<td>Health centers</td>
<td>20.5</td>
</tr>
<tr>
<td>Laundromats</td>
<td>43.2</td>
</tr>
</tbody>
</table>

Are hours of operation a barrier?
By community setting (n = 2,607; $p < .001$)

Reach and specificity
Criteria for prioritizing among settings

- Laundromats
- Health centers
- Public libraries
- Social services
- Churches
- Beauty salons
What’s known about coin laundries?

Attributes of desirable locations

- High population density
- High percent rental property
- High percent low income population
- High birth rate

What’s known about coin laundries?

Customer base

- 50% households < $15,000
- 20% households $15,000 - $25,000
- 30% of renters

Don’t just refer, connect.
New kiosks with cell phones
Don’t go to the party empty handed.
The ABC Immunization Calendar®
(Version 3.0)
Age-matched topic

Don't Forget
Bring Nikki for her next appointment date on:

August 4
10:00 AM

Now presenting... solid foods!

Is Nikki ready for solid foods yet? Many babies her age are. If you're not sure, ask your doctor. If you've already started Nikki on solid foods, you know that shopping for baby food can be overwhelming. Which foods would be best for Nikki? You might try rice cereal, applesauce, or mashed bananas to start with. But store-bought baby food is not your only choice. Many parents prepare baby food at home. For example, you can steam vegetables and strain them. Skip the sugar, salt, spices, or fat when you prepare your own baby food. Nikki isn't ready to eat foods with those extra seasonings yet. And remember, it's never too early to start healthy eating!
Tailored text

Tailored graphics

Birthdays: baby, parent, siblings

All messages personalized
Historical and cultural dates

January

17
Boxing champion Muhammad Ali was born on this day in 1942.

February

4
Rosa Parks, of the Montgomery Bus Boycott, born on this day in 1913.

September

8
SECTION 4: ENTERING PATIENT DATA

The main screen for entering patient data is the Patient Information screen, which has six different sections in which data are entered.

Figure 2: The Patient Information screen.

1. Baby (Patient) Information
2. Parent Information
3. Appointment History
4. Next Scheduled Appointment
5. Home Information
6. Sibling Information
7. Save
ABC Immunization Calendar® program in action
Does it work?

- Tested in 2 neighborhood health centers
- 378 babies; matched controls for each
- 99% African American
- 98% enrolled in WIC program
Percent up-to-date on vaccinations

Health Center 1 (n=132 pairs) p<.025
Health Center 2 (n=189 pairs) p<.001
Both Sites (n=321 pairs) p<.001

Find and use population-specific channels.
188 Black newspapers; 6M circulation
Study sample: Black papers in 24 cities
Research questions

1. What is the current state of cancer coverage?
2. Can we increase amount and quality?
3. Will changes in coverage affect readers’ perceptions, decisions, behavior?
The usual approach
A better way

Make cancer information more…

1. Locally relevant
2. Race specific
3. Culturally appropriate
Is anyone doing this now?
Survey results

• 57% have Black media on mailing list
• 43% localized press releases for different communities
1 IN 4 BLACK WOMEN IN RICHMOND COULD BENEFIT FROM NEW CERVICAL CANCER VACCINE

A new vaccine to protect women from cervical cancer may be especially valuable to African American women. The vaccine prevents women from getting HPV, a virus that can lead to cervical cancer. African American women are more likely to die from cervical cancer than any other group of women in the U.S.

The vaccine, called Gardasil, has been approved for women ages 9 to 26 that have never had HPV. There are over 63,000 African American women in Richmond, and more than 17,000 are ages 9-26. That means 1 in 4 African American girls and young women in Richmond could be eligible for the vaccine.

“This vaccine is a significant advance in the protection of women’s health in that it strikes at the infections that are the root cause of many cervical cancers,” said Andrew C. von Eschenbach, MD, Acting Commissioner of the FDA. In the United States, the rate of cervical cancer among African American women is 12.4 per 100,000 population.

HPV is the most common sexually transmitted disease in the United States. An estimated 20 million people are currently infected with HPV. Most HPV infections occur without symptoms and go away without any treatment, but some can lead to cervical cancer. Both HPV and cervical cancer can be detected by getting an annual cervical cancer screening and a Pap test by the age of 21 or three years after becoming sexually active. In 2004, 89.1 percent of African American women in Virginia reported having had a Pap test in the past three years.

Tamika Felder, a 5-year cervical cancer survivor and founder of the www.TamikaAndFriends.org online community, said the vaccine will help African American women. “When I was diagnosed 5 years ago there was no HPV vaccine and no HPV test. Now, we have both. Cervical cancer is 100% preventable and no woman should die of it – especially African American women. This is a wonderful step in eradicating this cancer.”

The price of the vaccine is $120 per dose, and $360 for the full series of three doses. Insurance companies often cover the costs of recommended vaccines. Federal health programs such as Vaccines for Children (VFC) provides free vaccines to those under age 19 and covers Gardasil. The VFC program also allows children and adolescents to get vaccines through Federally Qualified Health Centers or Rural Health Centers if their private health insurance does not cover the vaccine. Check with your insurance provider about its coverage before getting the vaccine.

Community Resources

For your convenience, we have compiled several resources in the Richmond area that could provide additional information.

Tamika and Friends
www.tamikaandfriends.org

American Cancer Society
Glen Allen Annex
3061 Deep Rock Rd
Richmond, VA 23223
Phone: (804) 527-3700
Fax: (804) 273-0004

Massey Cancer Center
401 College Street, P.O. Box 980037
Richmond, VA 23298-0037
Phone: (804) 828-0425
Fax: (804) 828-0453
http://www.vcu.edu/mcc/

Ozioma® is a national cancer news service based in Missouri. It is funded by the National Cancer Institute in Bethesda, MD. Ozioma® provides minority media outlets with information about cancer risks, treatment and prevention with a focus on taking action to improve health in African American communities.
“There are over 62,000 African American women in Richmond, and more than 17,000 are ages 9-26.”
In 2004, 89.1 percent of African American women in Virginia reported having had a Pap test in the past three years.
FOR IMMEDIATE RELEASE: August 14, 2006
Phone: (573) 882-6225
Contact: Crystal Lungkins
E-mail: ozionanews@missouri.edu
Web user name: richmond
Web password: voice

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The vaccine, called Gardasil, has been approved for women ages 9 to 26 that have never had HPV. There are over 63,000 African American women in Richmond, and more than 17,000 are ages 9-26. Three African American girls and young women in Richmond could benefit from this vaccine.

“This vaccine is a significant advance in the protection against that which is at stakes in the infections that are the root cause of cervical cancers,” said Andrew C. von Eschenbach, MD, Acting Director of the FDA. In the United States, the rate of cervical cancer among African American women is 12.4 per 100,000 population.

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Tamika Felder, a 5-year cervical cancer survivor and founder of the www.TamikaAndFriends.org online support network, said she was pleased with the news that a vaccine exists.

“No woman should die of [cervical cancer] – especially African American women.”

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American Cancer Society
Glen Allen Annex
3961 Deep Rock Rd
Richmond, VA 23233
Phone: (804) 527-5700
Fax: (804) 273-6904

Massey Cancer Center
401 College Street, P.O. Box 80037
Richmond, VA 23298-0037
Phone: (804) 828-8450
Fax: (804) 828-8453
http://www.wcu.edu/mcc/

To order additional information on cervical cancer, call the American Cancer Society at 1-800-227-2345.

The Center for Cultural Cancer Communication, Inc., is a resource center for cervical cancer, says the vaccine will help African American women. “When I was diagnosed 5 years ago there was no HPV vaccine and no HPV test. Now, we have both and it is 100% preventable and no woman should die of it – especially African American women. This is a wonderful step in eradicating this cancer.”
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Richmond, VA 23298-0037
Phone: (804) 225-6600
Fax: (804) 628-8570
http://www.vcu.edu/mcc/

LVA Cancer Center
PO Box 800334
Charlottesville, VA 22908
Phone: (434) 924-9533
Toll free: (800) 223-9173
Fax: (434) 922-0918
http://www.healthsystem.virginia.edu/internet/cancer/
Black women could benefit from cervical cancer vaccine

A new vaccine to protect women from cervical cancer may be especially valuable to Black women. The vaccine prevents women from getting HPV, a virus that can lead to cervical cancer. Black women are more likely to die from cervical cancer than any other group of women in the United States.

The vaccine, called Gardasil, has been approved for women ages 9 to 26 that have never had HPV. In the United States, the rate of cervical cancer among Black women is 12.4 per 100,000 population.

To gauge the impact of the vaccine, look at Richmond, for instance. There are over 62,000 Black women in Richmond, and more than 17,000 are ages 9-26. That means 1 in 4 Black girls and young women in Richmond could be eligible for the vaccine.

“This vaccine is a significant advance in the protection of women’s health in that it strikes at the infections that are the root cause of many cervical cancers,” said Andrew C. von Eschenbach, MD, acting commissioner of the FDA.

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Tamika Felder, a 5-year cervical cancer survivor and founder of the www.TamikaAndFriends.org online resource center for cervical cancer, says the vaccine will help Black women.

“When I was diagnosed 5 years ago there was no HPV vaccine and no HPV test. Now, we have both. Cervical cancer is 100 percent preventable and no woman should die of it – especially African American women. This is a wonderful step in eradicating this cancer.”

The price of the vaccine is $120 per dose, and $360 for the full series of three doses. Insurance companies often cover the costs of recommended vaccines. Federal health programs such as Vaccines for Children (VFC) provides free vaccines to those under age 19 and covers Gardasil. The VFC Program also allows children and adolescents to get vaccines through Federally Qualified Health Centers or Rural Health Centers if their private health insurance does not cover the vaccine. Check with your insurance provider about its coverage before getting the vaccine.
Percent of Black newspaper issues with at least 1 cancer article

- Ozioma papers
- Control papers

Start of intervention

Quarter
Give community partners choice & control.
FOR THE FIRST TIME EVER, MAKE THEM YOUR OWN.

NIKEiD.

Base Color

Ankle Strap Material
Nubuck Patent

Ankle Strap Color

Swoosh Color

Lace Color
We Built the Original. Now It’s Your Turn.

Customize Colors
- Body: Select color
- Handles: Select color
- Bottom: Select color
- Zip-Top (optional): No, Yes (add $7.00)
- Gusset Color
- Outside Pocket (optional): No, Yes (add $2.00)
- Pocket Color
Step 2: Fit Style

2-1: Select Your Preferred Style/Fit
- Slim
- Classic
- Relaxed
- Cargo
- Carpenter

2-2: Leg
- Straight
- Bootcut
- Tapered
- Flare
- Relaxed
miyo
make it your own
Choose the photo, border, and question to make a poster that best addresses parents' concerns about HPV, cervical cancer, and the HPV vaccine.

Sample poster

**Step 1: Choose a photo**

A
Text goes here

B
Text goes here

C
Text goes here

D
Text goes here

**Step 2: Choose a border**

A

B

C
No Border

**Step 3: Choose a message**

A
Is the HPV vaccine safe for my daughter?

B
How can the HPV vaccine protect my daughter?

C
Should my daughter get the HPV vaccine?

D
Are there side effects of the HPV vaccine?

Center for Cultural Cancer Communication
How can the HPV vaccine protect my daughter?

1-800-4-CANCER
4 out of 5 women will get HPV. Will you?

1-800-4-CANCER

Center for Cultural Cancer Communication
<table>
<thead>
<tr>
<th>Question</th>
<th>Option A</th>
<th>Option B</th>
</tr>
</thead>
<tbody>
<tr>
<td>At your yearly visit, your doctor asks about your sex life. You tell her...</td>
<td>Only what you want to tell her. That’s private.</td>
<td>Everything. How else can she give good advice?</td>
</tr>
<tr>
<td>You get a letter in the mail saying you had an abnormal Pap test and should call the doctor. Then you...</td>
<td>Put the letter in a safe place — and find it two months later.</td>
<td>Call your doctor the next day and make a follow-up appointment.</td>
</tr>
<tr>
<td>You’re watching a talk show and a 23-year-old woman with cervical cancer is telling her story. You think...</td>
<td>“I hope that never happens to me.”</td>
<td>“That’s scary, she’s my age. I want to ask my doctor about that.”</td>
</tr>
<tr>
<td>You learn a common sexually transmitted infection called HPV can cause cervical cancer. Your best friend has HPV, so you...</td>
<td>Don’t say anything about it to her — you don’t want to scare her.</td>
<td>Tell her — she needs to know the facts and take care of herself.</td>
</tr>
<tr>
<td>You have questions that you want to ask the doctor, but she seems rushed. You decide to...</td>
<td>Ask the questions next time. You know the doctor has other patients to see, too.</td>
<td>Ask your questions anyway. You know you won’t see your doctor again for another year.</td>
</tr>
</tbody>
</table>

TOTAL A’s _____  TOTAL B’s _____

Turn the page to find out what your answers mean!
R U 18-26?
The HPV vaccine can protect you from cervical cancer.
Call to learn more.
1-800-4-CANCER

You’re connected.
You’re respected.
Are you protected?

National Cancer Institute

Center for Cultural Cancer Communication
I’d never heard of HPV
Most women haven’t
Here’s how to learn more:

1. Ask your doctor:
   - What is HPV?
   - What is cervical cancer?
   - Can HPV cause cervical cancer?
   - Can the HPV vaccine protect me from cervical cancer?

2. If you can’t talk with your doctor, call 1-800-4-CANCER. A cancer expert will answer your questions.

Call 1-800-4-CANCER Monday-Friday between 9:00 AM and 4:30 PM
50,091 materials ordered since Jan. 08
By 16 different organizations in St. Louis

- Colleges, public & vocational schools (n=6)
- Community health centers, FQHCs (n=3)
- Community-based organizations (n=3)
- Departments of health (n=2)
- Faith-based organizations (n=1)
- Local health foundations (n=1)
4 out of 5 women will get HPV. Will you?
Is MIYO *needed* for HPV materials?

9 different combinations from 14 organizations

<table>
<thead>
<tr>
<th>Organization</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
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<th>6</th>
<th>7</th>
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Calls to 1-800-4-CANCER
(group*time interaction, F=8.6, p=.004)

Calls to CIS
- St. Louis
- LRGV
- Kansas City
- El Paso
Create a diverse work force to help address disparities
Pathways magazine

- Make your DREAM career a REALITY
- What career would suit VCU?

- What's your learning STYLE?
- It's time to get thinking about YOUR FUTURE!

- What's your PERSONALITY TYPE?
- Create your own path to success!
Design

- Pre-post design
- 7th, 8th, 9th graders
- All students participated ($n_B=273$, $n_F=278$)
- Single school
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<th>Career</th>
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<td>Health inspector</td>
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<td>7</td>
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<td>Health policy analyst</td>
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Intervention

health communication research laboratory
Awareness increased for 6 of the 9 health careers in *Pathways*

Increase in awareness of featured health careers among African American students (n=171; all p<0.05)

---

Interest increased for 5 of the 9 health careers in *Pathways*

Increase in interest in featured health careers among African American students (n=171; all p<0.05)

<table>
<thead>
<tr>
<th>Name</th>
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<tbody>
<tr>
<td>Kassandra Alcaraz</td>
<td>MPH</td>
</tr>
<tr>
<td>Charlene Caburnay</td>
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<tr>
<td>Doug Luke</td>
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<tr>
<td>Kathleen Holmes</td>
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<tr>
<td>Chris Casey</td>
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<td>Vetta Sanders-Thompson</td>
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<tr>
<td>Delores Dotson</td>
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<td>LaBraunna Friend</td>
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<td>Kara Christopher</td>
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<td>Deidre Griffith</td>
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<td>Theresa Wiehagen</td>
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