Sociocultural Considerations in Advancing Cancer Prevention and Control in Low Resource Setting: The Case of Urban and Rural Populations in the US

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Overview

- Describe the populations of interest in terms of challenges faced
  - African-American, Appalachian, Amish

- Discuss strategies/lessons learned when addressing cancer prevention and control in these populations
  - 5 Lessons Learned

- Review remaining challenges to the uptake of cancer prevention and control strategies and optimal health in these populations
  - 5 Challenges
Urban Inner City

- Majority are from Winston-Salem, NC.
- Low-income housing communities
- One FQHC
- Predominantly African-American population
- Columbus, OH
- Many minority groups: African-American, Hispanic, Somali, Asian
- Health care is delivered by HD’s and FQHC’s, as well as free clinics
- Language, lack of insurance, social issues, cultural differences

Problems include: poverty, environmental exposures, crime, poor housing, discrimination, food deserts

Increased concentrations of minority populations

Health care organizations often struggle to meet the growing needs and demands

Squires and Kubrin, Urban Stud, 2005
Rural: Appalachian OH

- 32% of the U.S. is classified as “rural”.
- Part of federally designated Appalachia
- Mainly white, low income
- Healthcare Professional Shortage Areas
- Access to care is a major problem: cost, quality, transportation, trust
- Rural population understudied due to:
  - Physical location
  - Cost
  - Perceived need

US Census, 2010
Breast Cancer in Rural Women

- In Appalachia, 24% of women aged 50-74 received a mammogram in past year.
  - Barriers to care, lack of insurance, poorer health literacy
  - Travel and financial concerns
  - Traditional gender roles of home and childcare interrupted by travel

- As a result, breast cancer is more likely to be diagnosed at a later stage compared to urban women.

Katz et al, CEBP 2015
Lessons Learned

1. Take the message to the people with input from the people.
RFA released from NCI in 1991

Focus on increasing breast & cervical cancer screening among poor and minority women

Funded in 1992 to work in low-income housing communities in 2 cities
Community-based Interventions
FoCaS: Methods

Placed Nurse in Federally Qualified Health Center

In-Reach

HOW TO GET A MAMMOGRAM AT REYNOLDS HEALTH CENTER

1. Call for an appointment to get a breast exam and a mammogram at 727-8273, 727-8234 or 727-8283.

2. On the day of your appointment, check-in at the information desk.

3. When you see the doctor, tell him that you want a mammogram.

4. Take the forms from your doctor to the x-ray department and have your mammogram done.

IF YOU ALREADY HAVE A DOCTOR AT REYNOLDS HEALTH CENTER

1. Call for an appointment to get a breast exam and a mammogram at 727-8273, 727-8234 or 727-8283.

2. You will get the forms for a mammogram from the nurse’s station on the third floor.

3. Take forms to the x-ray department and have your mammogram done.

CELCIAL CANCER

All women are at risk for cervical cancer. But some things increase your risk. They are as follows:

* If you smoked more than 100 cigarettes
* If you had sex before the age of 18.
* If you had sex with more than 3 partners.
* If you ever had a sexually transmitted disease (vaginal, etc.)
* If you ever had warts or bumps on the outside of your vagina.

If you have had one or more of the above, you may be at a higher risk for cervical cancer. Ask your doctor for a PAP smear. It’s a quick and easy exam that doesn’t cost much.
FoCaS: Methods

Used Lay Health Advisors (LHAs) to deliver community education (groups and one-on-one)

Out-Reach

IS YOUR HEALTH AS IMPORTANT AS YOUR HAIR
If so:
When was your last mammogram and pap smear?

IT'S TIME . . . . . . . DO IT TODAY!
for more information:
Call 716-6401

The Body is GOD'S Temple
You know this is true,
Take care of GOD'S Temple
Take care of YOU

FoCaS On You . . .
Get a MAMMOGRAM
Get a PAP SMEAR

CALL FOR AN APPOINTMENT . . . Call TODAY!
For more information call the FoCaS Project at 716-6401
Fayette County Cancer Screening Project

Our Ancestors Believed in
Good Health and a Strong Spirit

Continue the Tradition
Get Your Mammogram
and Your Pap Smear

The FoCaS Staff wishes you a
Healthy Black History Month
FoCaS: Methods (con’t)

Used a Community Advisory Board and a Provider Advisory Board
FoCaS: Results

Screening Rates: Pre-to-Post Intervention

<table>
<thead>
<tr>
<th></th>
<th>Mammogram</th>
<th>Pap Smear</th>
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<tbody>
<tr>
<td>Comparison City</td>
<td>33% to 40%</td>
<td>67% to 60%</td>
</tr>
<tr>
<td>Intervention</td>
<td>31% to 56%</td>
<td>73% to 87%</td>
</tr>
</tbody>
</table>

18% Increase  
*p=0.04*

21% Increase  
*p=0.004*

*Paskett et al, CEBP, 1999*
Lessons Learned

2. *The Human Touch is the utmost important factor to addressing disparities in care*
Follow-up of Screening Abnormalities

- Mrs. Jones: 33 yo Black woman with cervical abnormality (HGSIL) on routine Pap test. OB/GYN recommended colposcopy within 6 weeks. No other health issues. Has 5yo twins. College education; working.

- Mr. Smith: 51 yo Black man, presented with rectal bleeding and pain. PCP recommended colonoscopy ASAP. Hx of mental health issues, no transportation, difficulty understanding instructions. Lives alone.

Who returned for follow-up?
Case Presentation

- Mr. Smith: 51 yo Black man, presented with rectal bleeding and pain. PCP recommended colonoscopy ASAP. Hx of mental health issues, no transportation, difficulty understanding instructions. Lives alone.

- Because he had a Navigator:
  - Coaching to take prep as instructed
  - Went to the hospital to accompany the patient home
  - Phone calls to his doctor's office, scheduling and transportation at OSU East
  - 5cm polyp removed on successful colonoscopy
  - Encouraged to be his own navigator

*Paskett et al., CEBP 2012*
*Freund et al, JNCI 2014*
Lessons Learned

3. Cost is still a barrier to care and it can mask cultural barriers that impact asking for help.
In Appalachia,

“We don’t talk about cancer.”

Katz et al, Qualitative Health Research, 2007
Gallia County: Problem identified

- At Coalition meetings, local health professionals expressed concern over the high rate of cervical cancer and lack of accessible resources.
- In 2007 and 2008, the Gallia County Health District completed 512 Pap tests; 18%-22% were abnormal.
- Abnormal Pap test rate in United States 3%-4%.
- 31%-47% of Gallia County clients with abnormal Pap results were non-adherent in receiving recommended diagnostic follow-up care.

Plan developed

- Identified Needs
  - GYN Committed
  - Raise Awareness
  - Enhance Education
  - Trained HCP Colposcopy Procedure
  - Colposcopy Equipment
  - Local Facility
  - Transportation Assistance
  - Colposcopy Procedure
  - GYN Committed
Colposcopy Clinic Project

- Project established a clinic to provide colposcopies at no cost for underserved Appalachian women.
- Goal to improve adherence to follow-up recommendations for women identified with abnormal Pap tests.
- Project funded by the Governor’s Office of Appalachia - Community Investment Fund.
  - Matching grant - coalition had to raise almost $4000.00
Outcomes

- Secured local doctor to provide colposcopies
- 54 clinics since April 7, 2010
- 97 colposcopies performed to date
- 6 women have required follow-up
- All women receive educational brochures and gas vouchers

Continuation of Clinic
  - Through the support of ACCN, Coalition has secured 501(c)3 to receive future funding, as needed
Lessons Learned

4. Offer with genuine concern and they will come.
“Wellness Wednesdays” and “Walk With A Doc Grocery Store Tour”
Inflatable Colon Exhibit

- Scripted and guided walk-through tours

- Pre-and-post assessments

- Talk with a physician and triage for clinic and/or endoscopy referral
“Screening Saturdays”: Free Colonoscopies

- Team
  - Scheduling
  - Patient navigator
  - Wellness Advocates
  - Nursing
  - Endoscopists

- Outcomes
  - 50 completed colonoscopies
  - 174 polyps removed
    - 72 tubular adenomas
    - 8 sessile serrated adenomas

Courtesy of Darrell Gray, II, MD, MPH – Winner of 2015 ACGA SCOPY Community Award
Lessons Learned

5. “Place” is a barrier.
Putting Healthy Food on the Table

- Vinton County was classified as a "Food Desert"
- Only full service grocery store for the 13,200 people in Vinton County closed on September 1, 2013.
- A Study of Food Deserts in Rural Ohio revealed that 24% of rural households drive more than 10 minutes to any retail food store.
- McArthur is the county seat for Vinton County and 100% of those households need to drive more than 25 minutes to the closest retail grocery store.

Goals of Project

- Establish a community garden in McArthur
- Initiate container gardens
- Encourage healthy eating through a wide array of programming on producing, preserving, and preparing fruits and vegetables
- Increase year-round access to fruits and vegetables among children and adults
- Raise awareness about the role of nutrition in preventing cancer among residents
Challenges to Overcome
Solutions Needed

Psychosocial Resources
- Socioeconomic status
- Health care access
- Social support (loneliness)
- Appalachian Self-Identity
- Coping Strategies

Health Behaviors
- Number of partners
- Condom use
- Prior abnormal pap

Perceived Stress

Gardasil Vaccine

HPV Exposure

Smoking Alcohol Use

Depression

Forsyth County Cancer Screening Project

Reynolds Health Center
Bowman Gray School of Medicine
334-628-6281

Community Training Manual
Analysis: Bachmann vaccine comments toxic, doctors say

Candidate Bachmann's comments on cancer vaccine for girls upsets physicians

Remark on HPV Vaccine Could Ripple for Years

By DENISE GRADY
Published: September 19, 2011

Bachmann HPV row prompts years for vaccine programme in US

Doctors and scientists say Bachmann's comments risk further reducing already low take-up rates for vaccine in US

community repudiates the suggestion by presidential candidate Michele Bachmann that a vaccine for human papillomavirus (HPV) is dangerous, doctors fear the damage has already been done.
Solutions Needed

- Real life problems require immediate attention vs health
  - Fill a prescription for tamoxifen for $90/month vs pay the rent?
- Place still exerts and influence
  - Stress and disease – “Under the skin” *(Taylor et al., Ann Rev Psychol 1997)*
  - Geographic isolation – Access to quality care; Slow diffusion of new technologies *(Groeneveld et al., Med Care 2005)*
- Role of providers in the face of limited time/resources
  - Most important reason for uptake of health behaviors – provider recommendations – are not always being given *(McGregor et al., AJG 2007)*
  - Cultural differences and language are still barriers to care
  - Cost of doing outreach not covered
- Sources of information are not always appropriate
  - Respected opinion leaders, eg nurses, teachers, often do not have correct information
  - National media is heavily relied upon
- Multi-level approach not widely utilized
  - Need policy makers, funders, etc to be included
Model for Analysis of Population Health and Health Disparities

Upstream Factors
- Social Conditions and Policies
- Institutions
- Social/Physical Context
- Social Relationships

Downstream Factors
- Individual Risk Factors
- Biologic/Genetic Pathways
- Individual Demographic and Risk Factors
- Biologic Responses and Pathways

Fundamental Causes
- Disparate Health Outcomes

(Warnecke et al., AJPH 2008)
Is There Evidence of Success?
It Can Be Done!

- Real life example of a show down in colorectal cancer disparities

Eliminating Racial Disparities in Colorectal Cancer in the Real World: It Took a Village

Stephen S. Grubbs, Delaware Cancer Consortium, Dover, and Helen F. Graham Cancer Center, Newark, DE
John Culley Jr, US House of Representatives, Washington, DC
William Rowson, Delaware Cancer Consortium, Dover, DE
Jill Rogers, Delaware Division of Public Health, Dover, DE
Nata Katsukes, Delaware Cancer Consortium, Dover, DE
Paula Hass, Delaware Cancer Consortium, Dover, DE
Kecia D. Paskett, College of Medicine and Comprehensive Cancer Center, Ohio State University, Columbus, OH

J Clin Oncol 2013
Delaware Cancer Consortium Plan: Top Down and Bottom Up

- Improve CRC screening rates among African-Americans: Statewide CRC screening program
  - Screening Navigator and Coordinator program
  - Reimbursement for underinsured
  - Case management of abnormal results
  - Screening for Life program paid for screening
- Timely resolution and treatment: Delaware Cancer Treatment Program (Began in 2004)
  - Reimbursement of up to 24 months of cancer treatment for uninsured
  - Engage and recruit underserved populations for screening
Success in Delaware

Percentage of Adults Ages 50+ Who Have Ever Had a Sigmoidoscopy/Colonoscopy, by Race, 2002 - 2010

Eliminated screening disparity
Colorectal Cancer by Stage of Diagnosis, African Americans, Delaware 2001 and 2009

- 235% increase in local stage diagnoses in African Americans
Success in Delaware

Age-Adjusted CRC Incidence Rates, Rolling 3-Year Averages, by Race: Delaware, 1999-2009

Eliminated incidence disparity
Success in Delaware

Age-Adjusted CRC Mortality Rates, Rolling 3-Year Averages, by Race: Delaware, 1999-2008

Reduced mortality disparity
Impact of Delaware Initiative

- Mortality decreased by 20% over 10 years
- DE mortality now in top 15 states of lowest mortality
- Greater rate of mortality drop among African Americans compared to Caucasians (42% vs. 13%)
- The CRC mortality racial disparity is narrowed and nearly eliminated
- The DE mortality racial disparity trend is opposite the US (SEER)
  - Universal screening
  - Therapy access (DE CA Treatment Program = Universal Care)
Conclusions

- Low-resource areas in the US suffer a disproportionate burden of cancer risk factors, incidence, and mortality
- Cultural and socioeconomic factors related to both “place” and racial/ethnic group contribute to disparities
- Interventions to address disparities are most successful if they include the multi-level factors related to these factors as well as the cancer problem in question
- These interventions need buy-in from all levels of the community – policy makers as well as community members.
- This strategy will also facilitate culturally-appropriate interventions that are:
  - Accepted
  - Long-lasting
  - Paid for
Thank You