

Using CBPR and Ethnographic Methods to Assess a Rural County and to Design a Substance Use Prevention Program

Pamela A. Kulbok, DNSc, RN, PHCNS-BC, UVA, SON

Nisha Botchwey, PhD, UVA, SOA

Peggy S. Meszaros, PhD, Virginia Tech

Ivora Hinton, PhD, UVA, SON

Donna Bond, DNP, Carilion Clinic

Nancy Anderson, PhD, RN, FAAN, UCLA

Esther Thatcher, MSN, UVA, SON



Presenter Disclosures

Pamela A. Kulbok

The following personal financial relationships with commercial interests relevant to this presentation existed during the past 12 months:

No relationships to disclose

Funded by the Virginia Healthy Youth Foundation (VHYF), formerly the Virginia Tobacco Settlement Foundation (VTSF)

July 1, 2009 – June 30, 2012



STUDY AIMS: Year 1

- ❑ Establish a community participatory research team (CPRT) in a *southern rural county* with youth, parents, community leaders (CLs), and interdisciplinary researchers from UVA, VT, and CC.
- ❑ Conduct a community assessment of a *southern rural county with the CPRT* to identify ecological, cultural, and contextual factors influencing substance-free and substance-using adolescent lifestyles.



STUDY AIMS: Years 2 and 3

- Evaluate effectiveness of prevention programs *with the CPRT* in light of the community's ecological, cultural, and contextual dimensions, health attitudes and behaviors, and *on that basis* develop a tobacco, alcohol, and drug use preventive intervention for this *rural tobacco-producing* community.
- Pilot test the intervention to determine feasibility, acceptability, obtain preliminary effectiveness data, and refine the intervention for formal testing in other rural communities.



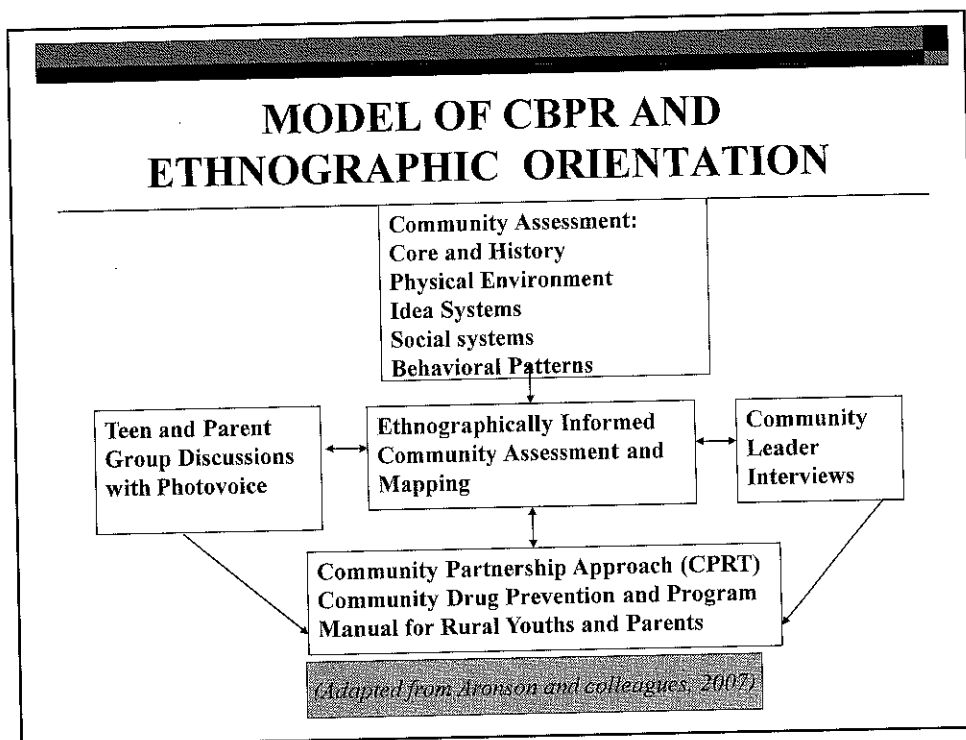
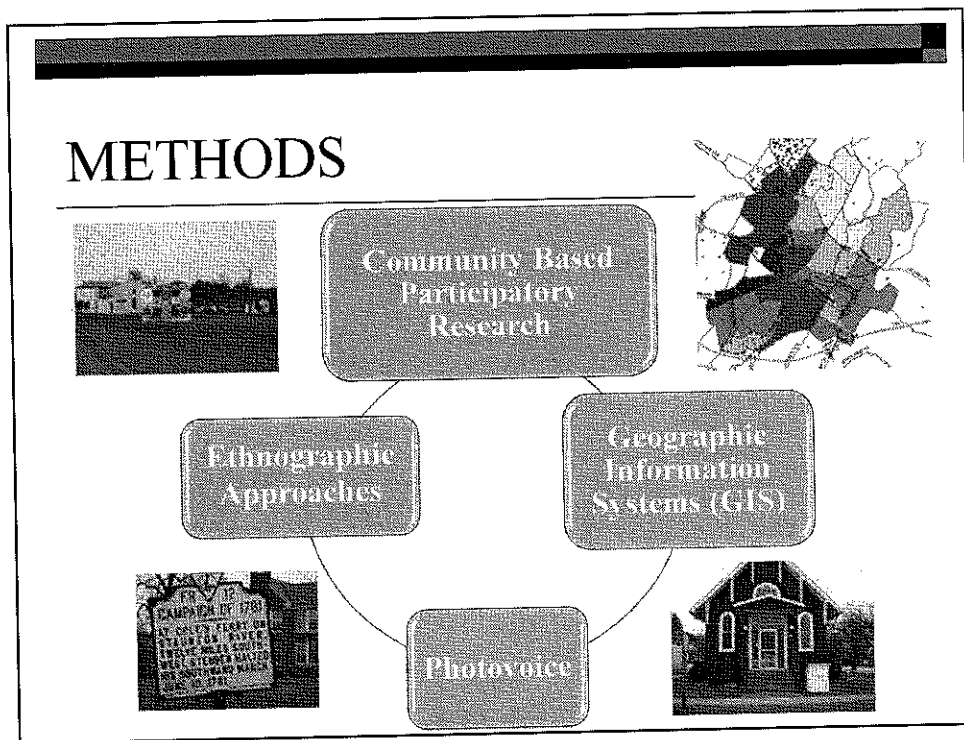
BACKGROUND



- Objectives of proposed HP 2020 for *adolescents* are to increase proportion who disapprove of substance abuse, reduce tobacco use, and increase age and proportion who remain alcohol and drug free (USDHHS, 2009).
- Nationally, 20% of male high school (HS) students and 19% of female students reported *current smoking*; 15% of males reported *current use of smokeless tobacco (ST)*; and, 14% of HS students *smoked cigars or 'little cigars'* (CDC, 2010).
- Daily use of *cigarettes and ST*, and *binge-drinking* were consistently highest among 8th, 10th, and 12th graders living in Non-Metropolitan Statistical Areas (Johnston et al., 2009).
- Non-MSA 12th graders had highest rates of recent use of *narcotics, inhalants, crack, amphetamines, crystal meth, barbiturates, tranquilizers*

(Johnston et al., 2009).





COMMUNITY ASSESSMENT DOMAINS

Community Core and History – Demographics and ethnicity

Physical Environment – Housing conditions, community agencies, natural and man-made barriers, licensed liquor stores, tobacco advertisements, etc.

Social Systems – Communication, economy, education, schools, politics, government, families and households, recreation, social networks, transportation and safety

Idea Systems - Community definitions, preferences, ideas about substance use in context of health, illness, and disease, ideas about parenting and roles in society, family priorities

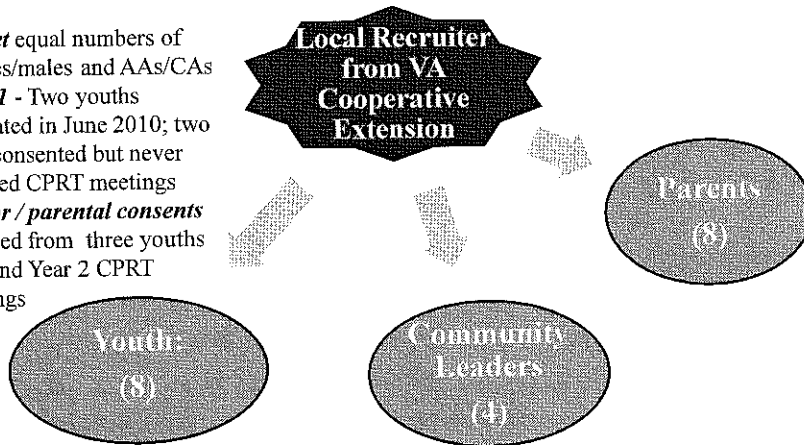
Behavioral Patterns –Physical activity, diet, self-care, risk behaviors, use of health services, community problem-solving capacity; parental involvement in schools, neighborhood social control; activism

PROCEDURES: IRB Approvals

- ***Secured initial IRB*** approval from UVA, VT, and CC:
 - Multiple submissions from July 2009 to October 2009;
 - Challenged to clarify nature of participatory research and roles of community members on the CPRT;
 - Challenged to minimize risk to substance using youth on the CPRT.
- ***Secured Certificate of Confidentiality*** December 2009.
- ***Subsequent IRB approvals*** obtained in phases:
 - Modification for community leader interviews.
 - Year 2 Continuation

PROCEDURES: Recruitment CPRT Participants (Goal n=20)

- *Target* equal numbers of females/males and AAs/CAs
- *Year 1* - Two youths graduated in June 2010; two were consented but never attended CPRT meetings
- *Minor / parental consents* obtained from three youths to attend Year 2 CPRT meetings



PROCEDURES: Recruitment Years 1 - 2 and Data Collection

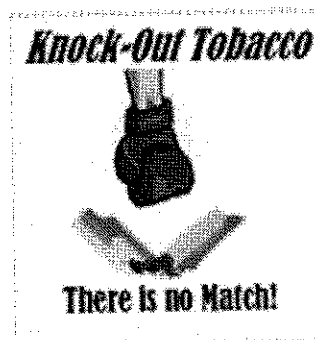
	CPRT	Group Interviews With Photovoice Demographic Data Youth Risk Behaviors	Individual Interviews Demographic Data
Substance-Free Youths	4	30-48	---
Substance-Using Youths	4	30-48	
Parents	8	30-48	---
Community Leaders	4	---	15-20
Total	20	90-144	15-20

Challenges and Improvements

- *IRB training for CPRT* → Help by investigators to access training and technology
- *Barriers to CPRT use of Collab platform for sharing info* → using Facebook for some group communication.
- *Nurse consultant's 2-day site visit* yielded recommendations for increasing leadership and collaboration of CPRT members

Highlights of CPRT Activities

- *Orientation to project*
 - Group cohesiveness activities
 - Rules for protection of human subjects.
- *Nominal group process* for CA questions, demographic and behavior surveys
- *Community leader (CL) interviews*
- *Created and voted* on name and logo for project

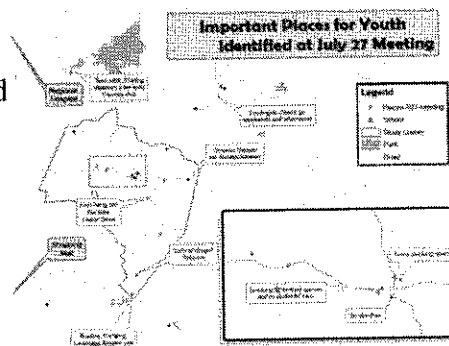


Community Leader Interviews

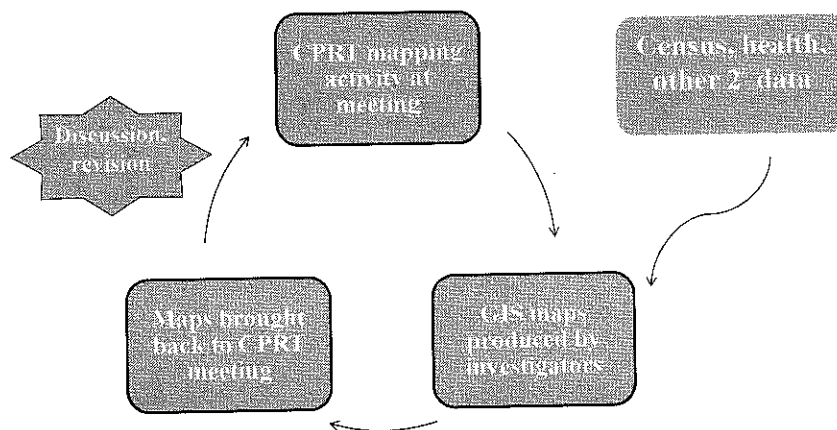
- ❑ *CA questions* developed and pilot tested by CPRT
- ❑ *List of CLs*, formal or informal, identified by CPRT
- ❑ *CPRT members* signed up for those they would feel comfortable interviewing
- ❑ *CPRT member and investigator* pairs have conducted 5 interviews to date
- ❑ *Transcription of interviews* will be analyzed using qualitative methods by investigators

CPRT Highlights (cont'd)

- ❑ *Review and validation* of investigators' community assessment, and windshield survey photos:
 - Group presentations and discussions facilitated by CPRT
- ❑ *Mapping* activities
 - Places related to substance use or nonuse



Validation and Review Cycle



Community Assessment Activities

Interdisciplinary Investigators

- Windshield survey (WS)
- Graduate students' community assessment (CA)
- GIS map production

CPRT: Local Knowledge

- Community Leader (CL) interviews
- Photovoice (small teams) for WS and CA
- Analyze 1st and 2nd data as group
- Validation and review of investigator team's findings

DATA ANALYSIS

- ❑ **GIS software** for community mapping, data integration, and analysis of primary and secondary data sources, i.e., U.S. Census, birth, death, and health statistics from the National Center for Health Statistics.
- ❑ **Qualitative analysis** of CPRT meeting minutes, group interviews with Photovoice, and community leader interviews.
- ❑ **Descriptive and multivariate statistics** to analyze demographic and YRBS data.



CONCLUSIONS

- ❑ **Collaboration** of investigators and CPRT:
 - Time-consuming,
 - Requires specialized skills, and
 - Requires cycles of review and validation.



CONCLUSIONS

- *Collaboration* is yielding high-quality data.
- Combining *CBPR and ethnographic* approaches:
 - Helps in application of local knowledge
 - To plan tailored community level interventions to prevent teen substance use.

