Community Based Participatory Research and Youth Tobacco Control:
A Qualitative Interpretive Meta-Synthesis

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Abstract

Researchers have long sought to document best practices in both youth smoking prevention and cessation programming. Of the numerous interventions targeting tobacco use among youth, community based participatory research (CBPR) has increasingly gained popularity. Through the use of qualitative interpretive meta-synthesis (QIMS), this article provides a synthesis of CBPR studies used as the intervention approach involving youth and tobacco control. The exploratory research question was: what do CBPR projects add to the tobacco intervention spectrum? Several themes emerged including challenges, solutions, and opportunities. Results indicate as these interventions continue to be realized and their processes and outcomes assessed, partnerships can enhance the quality and effectiveness of such approaches. Implications include a greater need to document tobacco prevention CBPR projects in the scholarly forum and a need for clarity in documenting the impact, not just the process, of a CBPR project utilized for tobacco prevention and cessation.

Key Words: CBPR, tobacco prevention, youth, community interventions, qualitative interpretive meta-synthesis (QIMS)

Introduction

The days of "Joe Camel" are long gone since the groundbreaking Tobacco Master Settlement (TMS) in 1998 when the tobacco industry was legally prohibited from intentionally marketing their products to anyone under the age of 18 in the United States (National Association of Attorneys General, 2008). Yet since the TMS, the American Lung Association (ALA) reports that youth in the United States on average have been exposed to over 559 tobacco ads annually (ALA, 2010). Even with legislation to hamper youth tobacco access, such as the 1992 Synar Amendment which required states to enact an age-of-sale law restricting purchases to buyers under age 18 (Forster & Wolfson, 1998) youth are clearly exposed to and accessing this product. For example, the National Institute on Drug Abuse report that nearly 90% of smokers start before the age of 18 (National Institutes of Health, 2007). In 2009 approximately 17.2% of high school students and 5.2% of middle school students were current smokers; percentages that have minimally changed since 2007 (Substance Abuse Mental Health Services Administration, 2009). Researchers have been tenacious in seeking to document best practices and effective measures that prevent youth from smoking and help them quit if they start, but no systematic synthesis of qualitative work on this topic has appeared to date.

To address and prevent the burdens of tobacco on society, particularly to proactively target youth prevention and cessation, different forms of intervention have been operationalized through public health, social work, nursing, and other disciplines (Lantz, Jacobson, Warner, Wasserman, Pollack, Berson & Ahlstrom, 2000). One such intervention and approach that has gained popularity in recent years is community based participatory research (CBPR) (Dick, 2004). Organically derived from the community at hand, CBPR allows for co-learners (the

participants from the community) to voice their needs, identify their assets, and set priorities throughout the process. It is therefore tailored to specifically accommodate the community involved in the process (Rhodes, Hergenrather, Yee, Wilkin, Clarke, Wooldredge, Brown, & Davis, 2007). Tobacco has created many health disparities and each community presents different and often unique types of problems and potential solutions.

     CBPR has been attributed to having its roots derived from a combination of action research and other research paradigms (Leung, Yen, and Minkler, 2004). CBPR has been described as an overarching term often inclusive of a variation of terms such as action research, participatory action research, and action-oriented research (Gustavsen, 2008). In essence CBPR is grounded in a framework that is inherently empowering; being exploratory in nature, new theories can be derived from the process. CBPR is much like action research in that it is a change methodology, growing in use and exposure to various disciplines (Dick, 2004). Within the spectrum of CBPR, the process itself engages a collaborative partnership between a community and trained researchers (Gronhaug & Olson, 1999). The goal of CBPR is to engage members of a community affected by a problem in generating knowledge and pragmatically helping to address their shared concern. In this process, the role of researcher becomes equal with the role of participant in terms of hierarchical constructs (Mendenhall, Whipple, Harper & Haas, 2008). Methodologies utilizing CBPR have been discussed as having a foundational relationship to empowerment where oppressed populations can improve contextual issues in their lives (Israel Schulz, Parker & Becker, 1998; Gustavsen 2008; Mendenhall, et al. 2008; Taylor, Fayter, Misso, Ogilvie, Petticrew, Sowden, Whitehead, & Worthy, 2004; Van Der Riet & Boettiger 2000). Not surprisingly, funding sources have increasingly endorsed CBPR as an intervention engaging a community-academic partnership (Viswanathan, Ammerman, Eng, Gartlehner, Lohr, Griffith, Rhodes, Samuel-Hodge…&Whitener, 2004) some of which have supported tobacco prevention and cessation efforts (see for example Clegg Smith, Bone, Clay, Thames, & Stillman, 2009; Horn, McCracken, Dino, & Brayboy, 2008; Mendenhall, Whipple, Harper, & Haas, 2008; and Ribisl, Steckler, Linnan, Patterson, Peyzner, Markatos…& Peterson, 2004). The popularity of this methodology has increasingly produced quality reports (Viswanathan et al. 2004), yet because of the individuality of each project and the differing needs of each community, credibility can be a challenge, particularly for researchers looking to the literature for relevant evidence. Furthermore, as CBPR continues to be a part of health education particularly with tobacco prevention, a qualitative interpretive meta-synthesis may be a useful resource for researchers from various realms of action inquiry who are seeking a starting place of examples, styles and lessons learned in and from the process. As CBPR gains popularity in addressing tobacco issues, the body of youth centered CBPR projects has not yet been systematically examined. This qualitative interpretive meta-synthesis (QIMS) attempts to provide a synthesis of findings and identify themes presented in qualitative papers discussing the results of CBPR as a prevention and cessation intervention involving youth and tobacco. The research question of this synthesis was: What do CBPR projects add to the tobacco intervention spectrum?

Youth Tobacco Prevention/Cessation Interventions

     Any review of youth- focused CBPR to address tobacco prevention should be grounded within the context of more general interventions targeting youth and tobacco. Such interventions have encompassed a wide variety of approaches including comprehensive life skills programs as well as other techniques including social influence methods, comprehensive community based programs, mass media campaigns, and policy initiatives (Backinger, Fagan, Matthews, & Grana,

2003). Further, youth-focused efforts have included school-based interventions, peer support coupled with educational sessions, motivational interviewing, laser-acupuncture (Garrison et al. 2003), and the use of behavioral and pharmacological aids, (Backinger et al., 2003). Together, two systematic reviews (Garrison, Christakis, Ebe., Wiehe, & Rivara, 2003; Backinger et al., 2003) noted above found that school-based programs coupled with media campaigns and smoking policies are more effective than the individual components when implemented alone, which are generally ineffective. Other studies have also found that the combination of interventions aimed at both prevention and cessation are the most promising for reducing youth tobacco consumption (for example, Lantz, Jacobson, Warner, Wasserman, Pollack, Berson, & Ahlstrom, 2000). Although these reviews have not specifically included CBPR interventions, one systematic review concluded that population-based tobacco interventions may contribute to a reduction in health inequalities because of its far reaching capabilities in touching disadvantaged groups (Thomas, Fayter, Misso, Ogilvie, Petticrew, Sowden, Whitehead, & Worthy, 2008). Furthermore, Kulbok, Rhee, Botchwey, Hinton, Bovbjerb, & Anderson (2008) identify a CBPR approach as being potentially appropriate for integrating youth from diverse backgrounds to investigate and aid in the development of tobacco prevention programs. CBPR is indeed a natural fit for diverse populations (Wallerstein, Oetzel, Duran, Tafoya, Belone, & Rae, 2008); however several questions remain: What types of CBPR projects have been implemented to aid in tobacco prevention and cessation with youth?; What themes emerge from these projects that others can potentially use for background knowledge prior to embarking on their own project?; and Collectively, what do CBPR projects add to the tobacco intervention spectrum?

Methodology

Qualitative interpretive meta-synthesis (QIMS)

Qualitative interpretive meta-synthesis (QIMS) was the method used for this study and is

a means to synthesize a group of studies on a related topic into an enhanced understanding of the topic of study wherin the position of each individual study is changed from an individual pocket of knowledge of a phenomenon into a part of a web of knowledge about the topic where a synergy among the studies creates a new, deeper and broader understanding. (Aguirre & Bolton, 2013, p.8).

There is a dearth of synthesis of qualitative research in social work, with only a handful of published syntheses to date, several of which have borrowed from other fields (e.g. Hodge, Horvath, Larkin & Curl, 2011; Watkins, Walker, & Griffith, 2010). Others (Saini & Shlonsky, 2013) have developed a qualitative systematic review process to assess the quality of qualitative studies. QIMS was chosen for the current study to arrive at an interpretive meaning from a collection of qualitative studies (excluding mixed methods and quantitative studies) on a particular topic. By bringing together the findings of several qualitative studies, some of the common concerns about qualitative studies are overcome such as small sample sizes, as well as concerns about representativeness of the sample and settings since this bringing together of different qualitative studies results in increased diversity among participants and setting; this, therefore, increases the transferability of findings. Furthermore sample size in QIMS is not defined by the number of studies, but by the number of participants, and, in this QIMS, the number of partnerships in each qualitative article. The goal of a QIMS is to create a synergy of qualitative findings based on identified qualitative articles including gray literature, books, and studies across disciplines.

Research question

       This QIMS was not a linear process; there were several steps incorporated that followed the iterative path toward synergistic understanding (Refer to Aguirre & Bolton, 2013 for a clearer illustration of the process). This path demonstrates the rigorous process involved in identifying articles, followed by the steps that yield data extraction and translation, leading to the synergistic understanding of the phenomenon. The first step in the process was to identify a research question. In developing the research question I sought to understand some of the differences in a CBPR intervention when compared to the other tobacco control interventions as described in the literature review. In the various systematic reviews of tobacco interventions, there was no mention of CBPR, yet the literature includes a number of CBPR-specific youth tobacco interventions. Three questions guided the process: What sort of CBPR projects have been implemented to aid in tobacco prevention and cessation with youth? What themes emerge from these projects that others can potentially use for background knowledge prior to embarking on their own project? Collectively, what do CBPR projects add to the tobacco intervention spectrum?

Instrumentation

       The use of bracketing strengthens the credibility of qualitative research by addressing pre-conceptions, so as to not inject a hypothesis or personal experiences into the study (Creswell 1998). The following section describes my experiences with the topics in this study and I note them in order to identify what I bracketed throughout the QIMS. My introduction to CBPR began with training where I learned experientially how to engage youth through collaborative movement regarding an issue of their choosing and keep them engaged through the duration of one full school year. I then had the opportunity to facilitate three additional CBPR projects this time in my capacity as a professional.

       There is one particular moment that continues to inspire me. Several years ago, I worked with a group of elementary aged youth in a low-income housing complex who were engaged in the CBPR process, utilizing photo-voice and focusing specifically on how tobacco has had a presence in their lives. After the photographs were developed and the youth began to thematically analyze their photos, one of the participants had a sudden realization as he looked at his picture of hundreds of cigarette butts stuffed into a flower pot; he said, "I never realized until just now that when my mom makes me dump out these cigarettes it makes me sick to my stomach and it makes me hate her sometimes." An amazing process was unfolding for this participant, and where he never had one before, he now had a voice and a way to describe his emotions about something he had never previously or consciously thought about. The presentation of their photographs and findings encouraged the residents to start their own public health campaign; here I saw firsthand how research influences people to challenge themselves. This experience proved to me that it is possible for anyone to be inspired by research and its findings. While many of my experiences have incorporated the topics in this study, they have been bracketed to the extent that is possible and the use of triangulation provided a checks and balance system to my position in this QIMS.

       To assist with this bracketing of personal experiences, the checks and balances system encompassed triangulation with a research mentor, who brought a level of expertise and objectivity. She co-developed the QIMS process and provided methodological guidance

throughout the project. She also has worked for one year in a federally funded smoking cessation project with high school students across five counties though CBPR was not employed.

Sample

CBPR has been discussed as being on a continuum (Jones, Koegel, & Wells, 2008), for example some projects emerge from the ground up within the community and others stem from partners in academia. Often the problem is identified by the local community but in the case of youth, tobacco is rarely on top of their issue list (or even on their radar). Therefore, the CBPR projects engaging youth on tobacco prevention and cessation tend to be more toward to middle of the continuum, where the outside researcher or funding agency has identified the topic but youth then are engaged in other aspects of studying and addressing the problem. The aforementioned projects were the targeted papers sought for this analysis. To identify the sample, electronic databases were searched (i.e., Academic Search Complete, Health Source: Nursing/Academic Edition, Google Scholar, EBSCO including Social Work Abstracts, Pro-Quest Dissertation and Theses Abstracts, PSYInfo, and One Search). The keywords used in varying combinations for the searches were those relating to the terms "CBPR" "Tobacco," and "Youth." Those search terms broadened using words such as adolescents, high school, action research, participatory action research, and cigarettes. For the sample, a quorum chart was used to document and organize the process of collection, elimination and inclusion (Figure 1).

Figure 1: Quorum Chart
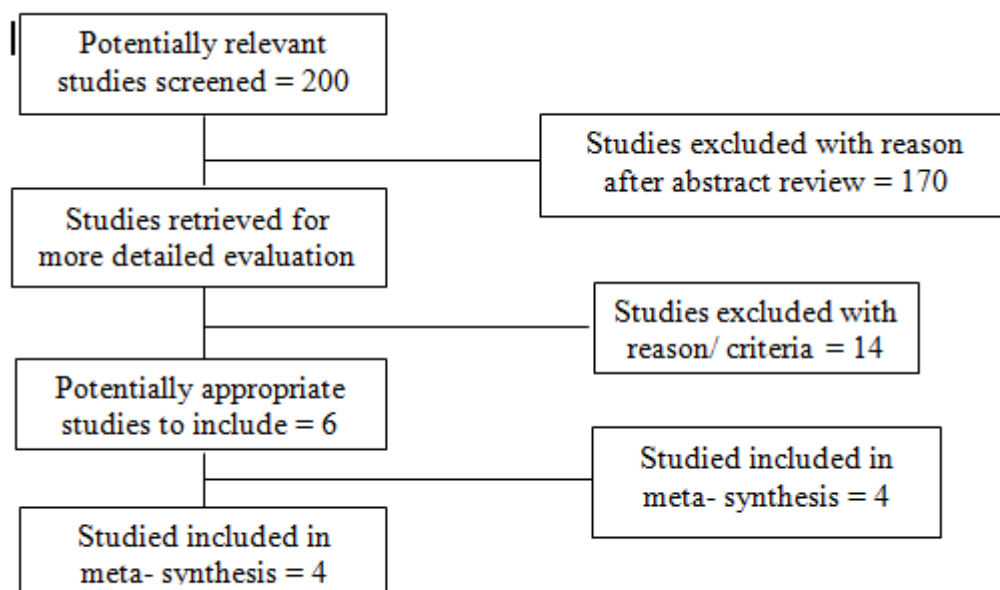
To be as inclusive as possible within these search terms, all years were included up to and including 2010, the current year at the time of beginning this manuscript. The first two searches broadly resulted in approximately 200 articles with any of the words above either in the text or title. Along with a research mentor as a co-analyst, we scanned each of the article titles and abstracts, duplicates were removed, followed by those that were not on topic in substantive areas, population, or methodological approach. After this process, the number of articles was reduced to 30. These remaining abstracts were then reviewed to ensure the articles reflected the necessary criteria: each one must discuss a CBPR project that prioritizes youth and targets tobacco

prevention and/or cessation. After reviewing the 30 articles, only 6 met the inclusion criteria. After the first triangulation meeting with the research mentor and a closer look at the sample, 2 additional articles were removed from the sample due to these not being all inclusive of the specific criteria. The final sample consisted of 4 articles which fit the following parameters: (1) CBPR project targeted toward youth tobacco control (prevention or cessation); (2) University and community partnerships were incorporated; (3) rigorous, credible, and included participant quotes.

Data Extraction, Synthesis, Triangulation

Descriptive data were extracted systematically from each article including the year published, location and population, number of collaborative partnerships if reported, sample size, project duration, primary research goal, and data collection methods. Simultaneously, a demographics chart was created to capture this information (see Table 1). The total number of collaborative partnerships was 10 and the total sample size was 499 participants. The sample consisted of a diversity of cultural and community representations within the United States; this included African American young adults, North Carolina American Indian youth from 8 different tribes, young adults from Minnesota ages 16 to 24, and adults of all ages and cultures involved in the community partnerships. The average length of these CBPR projects was three years. All studies concerned tobacco prevention or cessation with a community-academic partnership. In Table 1, the sample size represented the number of youth and adults whereas the number of partnerships represented the number of community/academic partnerships involved in each project.

Table 1: *Studies included in the sample*

Authors & Discipline	Target Populations	Location	# of Partnerships	Sample Size	Project Duration	Data Collection Methods
Clegg-Smith et al. (2009) **Public Health**	African American Young Adults (ages 18-24)	Baltimore, MD	4	14	1 year	14 key informant interviews.
Horn et al. (2008) **Social Work & Public Health**	American Indian Youth (8 Tribes)	WV and NC	6	264	3-4-years	Guided by 7 CBPR Principles, Interviews, focus groups, and spontaneous storytelling.
Mendenhall et al. (2008) **Public Health; Family Medicine & Community Health**	Youth/Young adults age 16-24	St. Paul, MN	2	23	Unspecified/ Ongoing	Active Discussions (focus groups); Social marketing

Table continued on next page

Authors/Disciplines	Target Populations	Location	# of Partnerships	Sample Size	Project Duration	Data Collection Methods
Ribisl et al. (2004) **Public Health**	Ethnicity reflective of state-wide demographics.	Charlotte, NC.	2	237	3-years	Participatory feedback evaluation and post-survey; Telephone interview & focus groups

Once the studies were selected, a grounded theory approach was used as an iterative and contextual process: (1) open coding was implemented to identify themes within each article; (2) axial coding was then used which connects codes and identifies the overarching themes; (3) triangulation with co-analysts was used to increase rigor and generate further understanding of the phenomenon. Grounded theory was chosen to analyze the studies because of its rigorous process and systematic approach to generate themes about a particular phenomenon (Creswell, 1998). During this process I used triangulation, which is a technique in qualitative research that facilitates validation of data through cross verification from more than one source (Creswell, 1998). Triangulation consisted of a research mentor examining each article thoroughly, conducting the same grounded theory approach (as described above), and followed by comparing axial codes until saturation was achieved (Glaser & Strauss, 1967).

The diversity in the sample allowed for overarching themes to represent each article and provide greater insight into CBPR interventions for tobacco control. As suggested in **Table 2** summarizing the overarching themes in each project, several commonalities were seen including themes representing new possibilities for projects, obstacles within the projects, and solutions to challenges.

Table 2**:** *Extracted Themes*

Article	Themes (extracted using authors' words)
Clegg Smith et al., 2009	Opportunity: Young adults in a mindset to see change in their lives Opportunity: Existing mentorship relationships with "caring" adults Challenge: Role of tobacco in the lives of young adults Challenge: Tobacco use in the education and job training programs Solutions: Need for continued discussion among the leaders themselves about participants' need for basic tobacco education as it relates to health Solutions: Any tobacco control intervention should take a holistic approach and occur in conjunction with other ongoing programs

Article	Themes (extracted using authors' words)
Horn et al., 2008 **Used a framework of principles and organized their themes under those existing principles.**	(Principles guided by Israel et al., 1998) Goal: Reduction in teen tobacco addiction, using 7 principles. Principle 1: Recognizing community as a unit of identity and community needs Principle 2: Building on strengths and resources within the community Principle 3: Facilitating partnerships in all phases of the research Principle 4: Promoting a co-learning and capacity building Principle 5: Integrating knowledge and action for mutual benefit of all partners Principle 6: Utilizing a cyclical and iterative process Principle 7: Disseminating findings and knowledge gained to all partners
Mendenhall et al., 2008	a. Framing the problem b. Strong and shared sense of trust and identity as a collaborative and community-based initiative began to evolve c. Fighting job stress and boredom d. Maintaining and ensuring sustainability e. Measuring community-wide impact f. Democratic Decision Making
Ribisl et al., 2004	Goal 1: a. Participatory Research Component b. New Groups and Lack of Adult Time Constraints c. Groups dispersed across the state d. Turn-over/Attrition Goal 2: a. Growth and Characteristics of Youth Groups b. Youth feeling discouraged Goal 3: a. Lack of involvement due to fear or retaliation b. Tobacco-Free School Policies and Youth c. Local movement vs. critical mass (state-wide) d. Training and resource issues e. Questionable adult responses to youth ideas

Findings

These projects were very eclectic and iterative in their own processes, yet shared similarities across groups. Based on the commonalities that emerged from the axial codes, the

findings of this QIMS fall into three overarching categories initially modeled after the themes found in the Clegg-Smith et al. (2009) article: Opportunities, challenges, and solutions.

Opportunities

Opportunity is about the possibilities that can or may result once a CBPR project has been initiated. Participants from the sample identified that "relationships matter" in a tobacco focused CBPR project and they can be translated into successful outcomes alongside future opportunities. One participant said:

> *Once you have the young people in a safe environment, a nurturing environment staffed with staff that they know really care, and that they trust, and the relationships are formed—once you create that environment, [then] you can deal with the smoking, you can deal with the drugs, you can deal with the life changing issues and the young people will be responsive* (Clegg-Smith et al., 2009, p. 13).

Relationships encompass the opportunity for mentorship, motivation and overall change in this type of intervention.

Likewise, "empowerment" was another sub-theme within the category of opportunity. As participants became empowered more opportunities arose. One participant noted, "Although the project initially focused on teen-cigarette-smoking cessation, capacity building efforts helped to identify other areas of tobacco control that the community wanted to address" (Horn et al., 2004, p.61). Feeding back into the iterative process, communities saw opportunities to continue work together broadening their scope beyond the initial project. In these studies the concept of empowerment was integral to the overall outcome of each project.

Challenges

Challenges had three integrated sub categories that lent themselves toward understanding obstacles that are faced within CBPR tobacco interventions. "Group cohesion" was one challenge faced by many participants who acknowledged facing attrition and addressing a level of readiness for change. One co-learner commented in their summary, "Although community leaders were ready to intervene with tobacco use among youth and adults, community members were not consistently at the same level of readiness, especially the youth" (Horn et al., 2008, p. 60). Group cohesion tended to be impacted by conflicting obligations for staff members (e.g.. multiple jobs, roles in the community), different levels of readiness for the youth (e.g.. not ready to quit) and an understanding of how turn-over needed to be addressed within the process (e.g.. addressing attrition of youth who either grow up or move on).

Another set of challenges faced by participants was a general sense of "fear and retaliation for participation." These challenges included a lack of involvement in the process due to fear and a sense of frustration resulting from minimal communication and other issues. One participant remarked, "Adults just don't listen to us" (Ribisl et al., 2004, p.608). Perhaps youth working towards action related to tobacco control felt they did not have the power, or did not feel supported or mentored. Others were empowered yet felt there were too many limitations:

> Don't get me wrong, I love our group, and we are really good at getting our message across, but we also, since we work for the state, we have a hard time doing things against the state, and taking a big stand on things like that, so a letter-writing campaign is the thing we can do that is least likely to get us fired or have some bad blood there. (Ribisl et al., 2004, p.608)

Finally, the "hampering role of tobacco" became a sub-theme among challenges which included social norms, retaining the spiritual aspects of tobacco, and framing the problem. Although each of the aforementioned challenges was closely related to opportunities, they began first as challenges. The perception of tobacco as a role in the lives of individuals dictated their level of readiness for change. Two very powerful quotes from co-learners imply how the role of tobacco can be hampering for prevention and cessation: "Teenage pregnancy, homelessness, running water and electricity in the home, parents not parenting them, food, employment. Cigarettes are just not at the top of the priorities for the ones that do smoke" (Clegg-Smith et al., 2009, p.14). In addition to being a lower priority in some communities, American Indians felt conflicted with the term tobacco, "[We] recognize, be amenable to learn, and understand that sacred tobacco use and smoking commercial cigarette tobacco have separate purposes and functions. The challenge…is to retain the cultural use and value of tobacco while addressing the abuse and chronic effects of cigarette smoking" (Horn, et al., 2008, p.50). Tobacco being normative in so many communities due to commerce, group culture, and social norms, meant each group in the sample had to address this challenge prior to targeting solutions.

Solutions

Solutions to challenges and implications for future projects were derived from within the process for each project. "Framing the problem" addressed how to solve the problem of defining the role of tobacco from the American Indian perspective, "Addiction is an evil spirit; [tobacco is not]" (Horn et al., 2004, p.55). Framing the problem meant analyzing what the problem really was before moving forward: "Many of our students who smoke miss class because they're running back and forth from the smoking area during breaks. So they're missing class" (Mendenhall et al., 2008, p.227).

Another solution was acknowledging the importance of "tailoring the project locally." For some it occurred in the process as an immediate solution: "American Indian youth also asked for a greater focus on group identity versus individually focused cessation efforts" (Horn et al., 2004, p.58). For others it became a lesson learned at the termination of the project: "Replicating the CBPR process is key (as opposed to straightforwardly replicating one project into another area, population, or group) insofar as it enables communities to create and tailor interventions immediately relevant to their needs" (Mendenhall et al., 2008, p.230). These solutions became a part of the internal process of each project, which provided clarity and a direction for the next step of the iterative process.

Discussion

Qualitative interpretive meta-synthesis (QIMS) was developed to address the lack of a consistent approach to synthesis of qualitative research. The current QIMS on CBPR and youth tobacco control demonstrates the usefulness of the QIMS method in creating a holistic, synergistic understanding of CBPR and tobacco control informed by multiple qualitative studies. Findings indicate that 1) the opportunities in using CBPR with tobacco control are created through emphasizing the importance of relationships and empowering the community through those relationships; 2) the challenges in conducting CBPR with tobacco control are group cohesion—providing further emphasis on the importance of relationships, fear of retaliation, and the hampering role of tobacco; 3) and the solutions to these challenges include both framing the problem and tailoring the project with according to the community's culture and needs through their involvement which is inherent in the CBPR approach. This third item is consistent with the

recommendations by Israel et al. (2005) that the CBPR process should include the researchers and community jointly developing and implementing core values of the CBPR project—an essential step in the process.

There are two important aspects of this QIMS I found necessary to address after considering the findings of this study. First, tobacco interventions take all shapes and forms with a common goal of youth tobacco control. CBPR projects are just one type of approach used for health promotion and empowering diverse communities in the process, often removing the barrier to intervention accessibility. Based on the findings of this paper, CBPR as a tobacco control intervention appears to be a true hands-on approach in addressing a central goal. Given the need to tailor each project to the individual community, one clear theme appeared to be an absence of a "how to" manual for just this purpose. This finding lent itself to contextual and iterative processes in each project. Furthermore, one important finding was that the value of replication of the process, not the replication of the events, was a consistent implication. Therefore, although a "how to" manual was not appropriate, the documentation of the process was necessary and useful, particularly if future CBPR projects would like a guidance model.

One consistent theme in triangulation with the literature on tobacco control interventions is the need for them to be comprehensive, not just single, one-time events (Lantz et al., 2000). Consistent with this QIMS, the projects in our sample identified new goals and issues affecting the community lending themselves to new projects. Unfortunately, in today's American health systems, time-limited groups are gaining popularity due to their cost-effectiveness. This research adds to the realm of interventions that may be more effective outside of time constraints.

Implications

This study had a number of implications of research, policy and practice. Implications for research were prevalent throughout this study including first, a greater need to document CBPR interventions tailored to tobacco control. Although an exhaustive search of the literature returned articles that had at least one key term as depicted in the quorum chart, the final sample consisted of only four articles that fit the criteria. Albeit rich in information, the limit of articles left us with more questions than answers. It appears that the process is a common phenomenon reported in these interventions however, there is a great need to additionally document the impact as well. The impact was implied in these articles, yet there were no overarching themes across or within articles indicating the overall impact. One article mentioned that after the pilot study, another article would be written to document the impact (see Horn et al., 2008). Still, this message is clear, and considering the need to document outcomes for funding sources, CBPR tobacco interventions ought to consider this implication for future research. It may be argued that the process is the impact, and if this is the case future research should consider documenting this more extensively. Furthermore, this implication informs a second implication which is a call for researchers to create a model which assesses the impact of these types of community based research interventions. Lastly on impact, intentional credibility, as I use in this article, went unreported across the board; although several articles mentioned some of the reasons why certain individuals were included as co-learners. The impact of each intervention may have been strengthened had there been credibility statements by the co-learners. Even if only brief, these statements can provide insight into the preparations of each project as well as increase the rigor necessary to overcome some of the limitations in qualitative research.

Other research implications concern one of the findings related to challenges: fear of retaliation. For example, the Ribisl (2004) article had co-learner quotes discussing the limitations of state funding. An examination of all the articles included a cluster of publishing between 2004 and 2008 that may be related to funding from sources with similar priorities during that time frame, and this finding might be a non-generalizable phenomenon, only impacting those particular studies. On this same note, this challenge also indicated a need for communities to seek ways in which to open safety nets for policy advocacy. Certainly, in states where tobacco is an economical concern (eg. a part of the farming economy), groups may be more hesitant to advocate for change in this area. CBPR projects being collaborative in nature may find it useful to engage key stakeholders in these tobacco CBPR projects, particularly in areas where tobacco has a strong weight on economic outputs.

Finally, given that CBPR interventions are the blending of research and practice, many of the research implications also apply to practice. One specific practice implication is for future practitioners to incorporate a proactive intention to address sustainability. Due to the widely reported need to address turnover in the projects, CBPR practitioners ought to prioritize attrition in their initial project goals. This is especially true when targeting a youth population. After some time, youth age out of programs, drop out, or change interests. Incentives such as stipends and even encouragement may be helpful to address attrition unrelated to age-out factors.

Limitations

Although the sample size of participants was increased in this QIMS, the small number of articles was the greatest limitation of the qualitative interpretative meta-synthesis. As CBPR is a diverse approach to research and interventions, it is possible the search terms did not exhaust all related projects documented in the literature. Another limitation of this article is making comparisons. For example, some studies were tailored to create an intervention, some were the intervention and some were a combination of both. Perhaps there were more divergent cases available as opposed to similar cases. Despite these limitations, several implications were formed on the basis that CBPR tobacco intervention projects are inherently different in nature, because they are supposed to be different. There are lessons that can be learned and useful information that can be relevant to future projects.

CBPR projects focused on tobacco control have important promise in the field, however, more documentation beyond the process is needed to demonstrate impact. Essential elements that should be included in assessing impact include the hampering role of tobacco, i.e. the dynamics of addiction, and the interfering role of fear of retaliation, especially when tobacco control has economic impact. Documentation of impact, added to the extant literature on process, will move the field forward in understanding the importance of a CBPR approach to the control of tobacco use and possibly inform other possible uses of CBPR.

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