Some Under-utilized Tools for Increased Rural Sanitation Impact

Rhonda Johnson, DrPH*
Water Management in Cold Regions
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* (with thanks to Kathy Anderson, PhD, Kate Bishop-Williams, PhDc and Bonnie Duran, PhD)

Overview:

- "Nothing new under the Sun"
- Health Behavior Change and Social Marketing
- Community-Based Participatory Research
- Communication for Social Change and K*

Overview:

- “Nothing new under the Sun”

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Bull. Wld Hlth Org. } 1954, **10**, 145-154

HEALTH EDUCATION ASPECTS OF SANITATION PROGRAMMES IN RURAL AREAS AND SMALL COMMUNITIES

MAYHEW DERRYBERRY, Ph.D.

Chief, Division of Public Health Education, US Public Health Service

SYNOPSIS

In large population centres, the sanitarian can effect the environmental changes needed without necessarily gaining the widespread participation or understanding of the people who are to benefit. In villages and rural areas, however, this is not so, since the people themselves will have to perform many of the actions needed to break the chain of transmission of disease. The sanitarian, to be successful, must therefore apply the sciences of human behaviour in any attempt to carry out environmental improvements.

Before any educational programme for environmental sanitation can be planned, it is necessary to obtain the essential facts about the people of the community. It is, for instance, necessary to find out what health problems they recognize and are interested in, how much they already know, what the usual channels of communication are, what social, cultural, and other influences are operating, and what are the existing resources that could contribute to the programme. In the actual planning, the sanitarian must consider how to get the participation of the people, what decisions can be left to the people themselves, what informational materials are likely to be needed and how they are to be used, and what the criteria of progress are to be.

If all these questions are satisfactorily answered, the sanitarian can assist the people to accept responsibility for their own improvement.

Over the years, sanitarians [1] have made great strides in reducing disease through their efforts at controlling or eliminating those factors of the environment that favour transmission. They have built central facilities for water supply in which the water is made safe through filtration and

[1] Throughout this paper the word "sanitarian" is used as a generic term embracing sanitary engineers and other public-health workers engaged in the practical application of sanitary science.

Improvement of the environment for better health is not just a matter of technology. It may impinge on various beliefs and customs of people and lead them to reject such action. This basic principle is emphasized in this article.

THE ROLE OF BELIEFS AND CUSTOMS IN SANITATION PROGRAMS

Benjamin D. Paul, Ph.D.

MAN IS A BIOLOGICAL and social animal; he is also a cultural animal. He is cultural in that he runs his life and regulates his society not by blind instincts or detached reason alone, but rather by a set of ideas and skills transmitted socially from one generation to the next and held in common by the members of his particular social group. Culture is a blueprint for social living. Man resides in a double environment—an outer layer of climate, terrain and resources, and an inner layer of culture that mediates between man and the world around him. By applying knowledge which comes to him as part of his cultural heritage, man transforms his physical environment to enhance his comfort and improve his health. He also interprets his environment, assigning significance and value to its various features in accordance with the dictates of his particular culture. Among other things, culture acts as a selective device for perceiving and understanding the outer world. Since cultures vary from group to group, interpretations of the physical environment vary correspondingly.

Ordinarily people are unaware that culture influences their thoughts and acts. They assume their way is *the* way or the "natural" way. Interacting with others in their own society who share their cultural assumptions, they can ignore culture as a determinant of behavior; as a common denominator, it seems to cancel out. An engineer can construct health facilities in his home area without worrying too much about the cultural characteristics of the people who will use the facilities. Sharing their habits and beliefs, he has in effect taken them into account. But in another country with another culture, his assumptions and those of the residents may not match so well. In parts of Latin America maternity patients of moderate means expect a private hospital room with an adjoining alcove to accommodate a servant or kinswoman who comes along to attend the patient around the clock. In parts of rural India the hospital should be built with a series of separate cooking stalls where the patient's family can prepare the meals, in view of cultural prohibitions against the handling of food by members of other castes. And of course the effect of cultural differences looms even larger where sanitation has to be built directly into the habit systems of people, rather than into structures and plants that serve the people.

Anyone familiar with the operation of technical assistance programs knows about the kind of behavioral differences I have mentioned. Unfortunately, how-

Overview:

- Health Behavior Change and Social Marketing

Changing behavior is not just a matter of…

- Education, or
- Willpower, or
- Technology

- Because we are complex beings, with
  - Free will
  - Competing interests
  - Social context
  - Psychological makeups
  - …

Social Change Marketing

INFORMALLY:

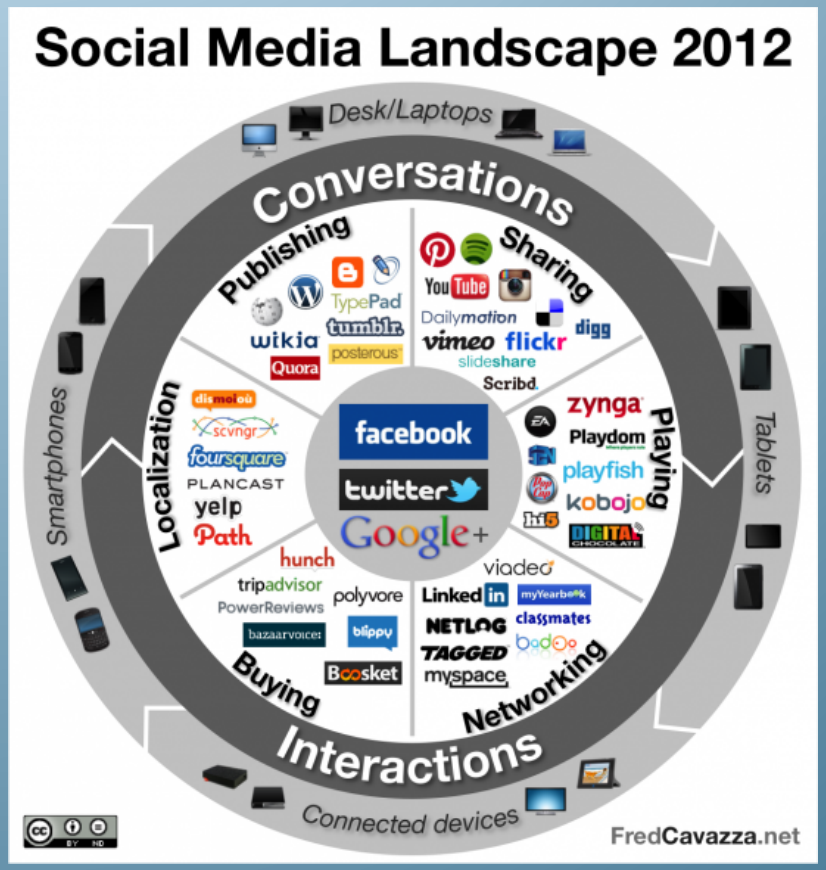
"Influencing Behaviors for Good."

"Social [Change] Marketing is a process that uses marketing principles and techniques to influence target audience behaviors that will benefit society as well as the individual."

Nancy R. Lee, Mike Rothschild, Bill Smith (2011)

Social Marketing vs Social Media

- **Social marketers sometimes use social media**



Hallmarks of Social Marketing

A. Behavior-change centric

B. Theory-informed

C. Careful segmentation of target audiences

D. Intensive target audience research

E. Understanding the "exchange" from the audience perspective

F. Using all of the above to creating an integrated, tailored set of interventions

- **Uses all the techniques of traditional marketing, not just advertising or communications (aka "4Ps")**

(adapted from French, et al. (2011)

TYPICAL APPLICATIONS

- **Public health**
- **Environment**
- **Personal finance**

- **Often combined with community-based participatory methods (CBPR)**
  - **CBSM – Doug McKenzie Mohr, environmental psychologist www.cbsm.com**

A: IT'S ALL ABOUT BEHAVIORS

- **Reject: don't throw grey water out the window**
- **Modify: don't reuse grey water more than X times**
- **Accept: scrub the steam bath after every use**
- **Abandon: don't wash diapers in the kitchen sink**
- **Continue: Keep up the good work on honeybucket handling**

B. Theory-informed

- Often it helps to build your SM intervention on a behavior-change theory
  - Stages-of-change
  - Social norms
  - Diffusion of innovation, etc
- Common themes of these theories:
  - Positive intention
  - No/minimal environmental constraints
  - Skills, capabilities
  - Social context
  - Self-image
  - Experience is emotionally positive

F. **Using all** of the above research: **The 10 Step Planning Process**

1. **Establish Purpose & Focus**
2. **Analyze Situation**
3. **Select Target Audience**
4. **Determine Behavior Objectives & Goals**
5. **Understand Barriers, Benefits & Competition**
6. **Craft a Positioning Statement**
7. **Develop a 4-pronged Marketing Strategy**
8. **Determine Evaluation Plan**
9. **Set Budgets & Find Funding**
10. **Write Implementation Plan**

Chinese SM sanitation campaign (p.1) (Dickey et al., 2015)

- Background: Cysticercosis prevention
- Behavior change: Build, use, and maintain toilet
- Theory: possibly Social Norms or Social Cognitive
- Segmentation: rural Bai villages
  - Raise pigs, eat raw pork
- Understanding of "exchange"
  - Distrust of outside experts
  - Squat-style preferred over sit-style
  - Some wanted simple, others wanted elaborate
  - Main motivations: convenience, privacy, cleanliness, progress
    - note: not disease-prevention!

Chinese SM sanitation campaign (p.2)

- Elements of the intervention:
  - Demo toilets (three-chambered)
  - Half-day kickoff "fair" with games & prizes
  - Brochures and logo'd hats
  - Personal followup
  - Local building coordinator
    - Help find and train local builders
    - Construction quality-control
  - Government price subsidies (dependent on Q)
- Outcomes
  - Same # of toilets in intervention vs control villages
  - Superior user satisfaction and increased use of toilet in intervention villages

Summary

- Social [change] marketing is an effective, often-used framework for changing behaviors for the good
- It is complementary to technology solutions
  - Includes education
- Major differentiators vs standard techniques like education and health communications:
  - In-depth knowledge of target audience
  - Benefits of the behavior change are put in terms of their views, not "ours"
  - Full complement of marketing techniques
    - Including education and health communication

Overview:

- Community-Based Participatory Research

Another way to have more impact and learn more…

one useful approach

Community
Based
Participatory
Research

CBPR:

- An intersection between science and practice
- "inquiry with the participation of those affected by an issue for the purpose of education and action for effecting change"-

  Green et al, 2000

CBPR:

- "An approach that incorporates formalized structures to ensure community participation."
    - Agency for Healthcare Research and Quality(2004)

CBPR:

- "…equitably involves all partners…with a research topic of importance to the community with the aim of combining knowledge and action for social change to improve community health and eliminate health disparities."

- Kellogg Foundation Community Health Scholars, (2008)

Community-Placed vs. Participatory

- Who chose the problem to be studied?
- How is the budget divided?
- Is there an intervention or service component?
- Where are the results disseminated?
- Who designed the intervention?
- Who made the research policy decisions? (e.g. is there a control group?)
- Who writes papers/makes presentations? Who owns the data?

Source: Adapted in part, from Reyes et al. www.med.umich.edu/.../Fall%202005/Lichtenstein_Community-Based%20Participatory%20Research%20Workshop.ppt

Principles of CBPR

- Recognizes community as a unit of identity
- Builds on strengths and resources
- Facilitates partnership in all research phases
- Promotes co-learning and capacity building
- Seeks balance between research and action

Principles of CBPR

- Emphasizes local relevance and ecological perspective that recognizes multiple determinants
- Involves system development through cyclical and iterative process
- Disseminates findings and knowledge to all
- Involves long-term process and commitment

Israel, Schulz, Parker, Becker, Allen, Guzman, "Critical Issues in developing and following CBPR principles," Community-Based Participatory Research in Health, Minkler and Wallerstein, Jossey Bass, 2000

Participation in CBPR

Builds capacity and reduces dependency on “professional outsiders”

Ensures cultural and local competence

Facilitate sustainability

Enhances fit and productivity of programs

Addresses concerns of manipulation

Jewkes & Murcott, 1998, Rifkin, Muller & Bichmann, 1988, Cooke & Kothari, 2001

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Community-Based Participatory Research Contributions to Intervention Research: The Intersection of Science and Practice to Improve Health Equity

Nina Wallerstein, DrPH, and Bonnie Duran, DrPH

Community-based participatory research (CBPR) has emerged in the last decades as a transformative research paradigm that bridges the gap between science and practice through community engagement and social action to increase health equity.

CBPR expands the potential for the translational sciences to develop, implement, and disseminate effective interventions across diverse communities through strategies to redress power imbalances; facilitate mutual benefit among community and academic partners; and promote reciprocal knowledge translation, incorporating community theories into the research.

We identify the barriers and challenges within the intervention and implementation sciences, discuss how CBPR can address these challenges, provide an illustrative research example, and discuss next steps to advance the translational science of CBPR. (*Am J Public Health*. 2010;100:S40–S46. doi:10.2105/AJPH.2009.184036)

ALTHOUGH MUCH EVIDENCE exists of health and social disparities within populations of color and other marginalized groups, the real challenge lies ahead—to develop, implement, and sustain effective strategies to eliminate disparities in clinical and public health systems and population health status. Community-based participatory research (CBPR) represents a transformative research opportunity to unite the growing interest of health professionals, academics, and communities in giving underserved communities a genuine voice in research, and therefore to increase the likelihood of an intervention's success.[1] In this article, we add to the literature on intervention and implementation sciences by identifying barriers and challenges to building bridges between science and community-based practice and policy. We illustrate ways to address these challenges through an example of successful CBPR work done among American Indians in the Southwest, and through presenting CBPR as an overall translational strategy for diverse communities to improve health equity.

Several definitions of CBPR circulate widely. In their 1995 study of participatory research in Canada, Green et al. defined CBPR as an "inquiry with the participation of those affected by an issue for the purpose of education and action for effecting change."[2] In the definition offered by the Agency for Healthcare Research and Quality in 2004, CBPR is an approach that incorporates formalized structures to ensure community participation.[3] Focusing on disparities, the Kellogg Foundation Community Health Scholars Program states that CBPR

> equitably involves all partners . . . with a research topic of importance to the community with the aim of combining knowledge and action for social change to improve community health and eliminate health disparities.[4(p6)]

These definitions set the stage for CBPR to be able to address core challenges in intervention research.

CHALLENGES WITHIN TRANSLATIONAL INTERVENTION RESEARCH

The widening socioeconomic and racial/ethnic health disparities documented in the past 20 years,[4,5] the chasm in the quality of health care delivery, and the extended time it takes for research findings to translate into practice[6] have created a national urgency to design effective interventions, including an increased emphasis by the National Institutes of Health (NIH) on public health significance and impact. This context for the translational intervention sciences has produced an important new area of investigation that is now emerging as its own discipline—implementation science[7–9]—with a new *Implementation Science* journal, conferences, and calls by the NIH for proposals. According to the NIH, "Implementation [research] is the use of strategies to adopt and

Social Connectedness and Disease Transmission: Social Organization, Cohesion, Village Context, and Infection Risk in Rural Ecuador

Jonathan L. Zelner, PhD, James Trostle, PhD, MPH, Jason E. Goldstick, PhD, William Cevallos, MD, MSc, James S. House, PhD, and Joseph N. S. Eisenberg, PhD, MPH

Social networks are typically seen as conduits for the spread of disease and disease risk factors. However, social relationships also reduce the incidence of chronic disease and potentially infectious diseases. Seldom are these opposing effects considered simultaneously. We have shown how and why diarrheal disease spreads more slowly to and in rural Ecuadorian villages that are more remote from the area's population center. Reduced contact with outside individuals partially accounts for remote villages' relatively lower prevalence of diarrheal disease. But equally or more important is the greater density of social ties between individuals in remote communities, which facilitates the spread of individual and collective practices that reduce the transmission of diarrheal disease. (*Am J Public Health*. 2012;102:2233–2239. doi:10.2105/AJPH.2012.300795)

Studies of the transmission of infectious diseases[1,2] often use social networks as maps of direct contact that facilitate person-to-person transmission of pathogens. From this perspective, relationships are increasingly associated with greater individual-level risk.[3] The social cohesion and organization embodied in networks is, however, also critical to the functioning of communities,[4–6] but researchers typically neglect the influence of these factors on community-level infectious disease risk.

Social relationships have long been employed as contacts in transmission models[1,7–9] and as protective factors for chronic disease.[10,11] However, outside the literature on sexually transmitted diseases[12,13] there are few examples of the protective role of social relationships in the epidemiology of infectious diseases.[14] Yet individuals in strongly connected, socially cohesive communities are more likely to perceive economic and social interests as shared. Consequently, they may be more motivated and better organized to pursue collective goals such as building and maintaining effective water and sanitary infrastructure.[15]

This means that understanding infectious disease risk at the community level requires understanding not only how certain social networks may spread disease but also how other social networks may influence the infrastructure and behavior that can prevent population-level exposure. We examined 2 types of social networks from the same set of villages to test the hypothesis that increased social network connectedness predicts diminished risk of diarrheal illness, using a sample of 18 villages in rural, northern coastal Ecuador. Figure 1 illustrates our conceptual model.

We sought to measure specific risk and protective effects of social relationships via survey and social network analysis methods. In the first part of the analysis, we examined the association of village social networks and different routes of exposure to self-reported illness. In the remainder of the analysis, we attempted to explain these associations in terms of factors that affect village social networks (e.g., remoteness) and the mechanisms by which increased social cohesion is linked to diminished illness risk (e.g., improved water sanitation, education).

A road was recently built that connects some of these villages to the nearest large town, which has about 5000 inhabitants. Consequently, these villages now vary in their remoteness, measured by distance and time of travel to this trading center. Our previous analysis suggested that increasing remoteness is associated with increasing average degree in village social networks and that increasing average degree is associated with decreased prevalence of diarrheal disease.[16] Additionally, the connectivity of villages to communities in and outside the study region decreases with remoteness.[17] Consequently, less remote villages have more transient inhabitants and are more socially fragmented and therefore may be less able to build and maintain the water and sanitation infrastructure and promote hygiene practices than are more remote villages. We explicitly tested the relationships among these components, as described in Figure 1.

We defined a contact network as a network comprising relationships that are likely to facilitate transmission of pathogens, that is, a structure of connections through which an individual, denoted "ego," may infect or be infected by his or her network neighbors, denoted "alters." This network contains all the pathways an infection may follow through the community via direct human contact. In contrast to contact networks, we defined links in sociality networks as connections between people that represent specific types of social engagement. Connections in sociality networks can correspond to casual acquaintance, close friendship and trust, or economic exchange. The presence or absence of these relationships affects infection risk because they often determine whether communities have effective sanitary infrastructure and health services. In this way, more network connections (e.g., friends) may indicate protective social support, instead of increasing exposure, as in a contact-only network.[18]

COMMUNITY SOCIAL STRUCTURE AND RISK

Understanding how sociality networks influence infection risk in these villages required us to answer the question of how social organization and action can inhibit or enhance pathogen transmission via the environment. Figure 1 illustrates the mechanism by which we posit that this occurs. Poor quality sanitary infrastructure is a leading cause of infection by enteric pathogens such as cholera,[19–21] and such infrastructure is usually a public good

Overview:

- Communication for Social Change and K*

Inuit Youth Resilience in the Circumpolar North: Lessons Learned from an Innovative pan-Arctic TV Series on Inuit Wellness

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Inuit Tuttarvingat

Canadian Conference on Global Health Ottawa, 2010

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QANUQTUURNIQ
FINDING THE BALANCE

Uqaalaqattalaaqpusi pingasuirluta takuksaulaaratta
A 3-part call-in series on Inuit wellness

National Aboriginal Health Organization (NAHO)
Organisation nationale de la santé autochtone (ONSA)
ᑲᓇᑕᒥ ᓄᓇᖃᖅᑳᖅᓯᒪᔨᓄᑦ ᐊᐃᓕᖅᓯᖅᑭᑐᓂᓕᕆᔨᒃᑯᑦ ᑲᑎᒪᔨᖅᑎᑦᑎᓂᑦ

Background - Qanuqtuurniq*— Finding the Balance

- International Polar Year (IPY) outreach and communications project on **Inuit wellness** in Alaska, Canada and Greenland
- Broadcast on Aboriginal Peoples' Television Network – North (and 360-North in Alaska) in May 2009 and simultaneous Web cast
- Delivered in the Inuit language with English open captions / subtitles
- Focused on health issues of shared concern and community-based solutions and 'promising practices'
- Linked to ongoing IPY research (*Qanuippitali*? Inuit Health Survey)
- Used a 'communication for social change' model and multiple channels of delivery, some still continuing today

* In the Inuit language, *Qanuqtuurniq* implies working together to find innovative solutions.

Communication for Social Change

- Sustainability of social change more likely if individuals/communities affected own the process and content
- Empowering, horizontal relationships, with bias toward local content and ownership, and giving 'voice' to unheard
- Communities should be agents of own change
- Emphasis from persuasion and transmission of outside technical expertise to dialogue, debate and negotiation of issues that resonate with the community
- Emphasis on outcomes beyond individual behaviors to social norms, policies, culture and supporting environment

– Gumucio, 2001

Youth program panelists from Inuit regions with host.

Photo © Ed Maruyama

Three 2-hour live TV phone-in shows broadcast May 11-13, 2009:

1. Inuit men's health
2. Inuit maternity care
3. **Inuit youth resilience**

Engagement Opportunities - Pre-Broadcast

- **Working groups** developed the content script guides
- Video vignettes of selected **community programs**
- **Music/vocal recordings** contributed
- **Researchers and physicians** gave input
- **Facebook** page with over 600 subscribers

Vignette filmmaker and her daughter from Iqaluit, Nunavut .

Community Youth Video Vignettes

- **Inuusivut Project - Inuit Youth Media:** Through art, videos, music, photography and other multimedia, Inuit youth are finding new ways to express themselves..

Project Life (Maniilaq, Alaska): Project Life is a youth wellness and suicide prevention program for the Maniilaq area of Alaska. It uses digital story-telling.

Inuvik Youth Centre (Inuvik, NWT): The reality for many Inuit living in remote communities is the necessity to move to larger communities to continue their education.

Artcirq (Igloolik, Nunavut): You will see how Artcirq helps youth to express themselves physically and spiritually through traditional Inuit themes and circus acts.

Engagement Opportunities - During Broadcast

- Panelists
- Studio audience + physician
- Community focus groups
- Virtual youth focus group
- Skype for pre-arranged input
- Public phone-ins
- E-mail

Men's program panelists from Inuit regions.

Photo © Ed Maruyama

Evaluation findings related to engagement

- "The … TV series was an innovative, multi-dimensional, collaborative health communication project …"

  – Evaluation Report 2009

- Project perceived as successful by many participants: project team; panelists; community focus groups; viewers; others

- Project generated a lot of interest: new informal/formal networks; increased motivation for action; increased tools for action

Youth program studio audience.

Photo © Ed Maruyama

"It [sic] did a lot of networking within the community. … I had so many people come up to me and say they enjoyed the show, that they watched the show." – Community focus group facilitator

Evaluation findings related to engagement Cont'd

- "[The TV series] raised both **interest** and awareness about complex health conditions in the North. …
- "[It] **stimulated community dialogue** and potential for both local and regional collaborative action to address those conditions.
- "Local capacity and new regional **networks were strengthened**.
- " 'High-quality lessons' from the **participatory** evaluation of this 'communication for social change' project may be used to build on a **strong foundation of community-professional-academic partnerships**."

– Evaluation Report 2009

Sample quotes from audience surveys responding to:

The most important thing I learned today from the…
youth show was …

- *"About various initiatives across the North – **elders' point of view**"*
- *"Wide range of innovative projects and programs that are underway"*
- *"Noted how **many elders phoned in** – indicates that they watch APTN and are very motivated by youth issues"*
- *"The emphasis on the positive and being realistic about the challenges"*
- ***"Youth care and want to engage"***

Youth program panelist from Kugluktuk, Nunavut.

Photo © Ed Maruyama

– From audience surveys and key informant interviews.

Evaluation findings - actions planned

How will Key Messages be Used?

- *"I want to try and facilitate programs in my region to help Inuit."*
  – Men's wellness audience member.
- *"I'm going to share these videos with research partners and community partners."*
  – Midwifery audience member.
- ***"I feel more empowered to create and to do good things for my community."***
  – **Youth program audience member.**
- *"Bring this knowledge to my home community Nain and consider Inuit maternity care myself."* – Midwifery audience member.

Maternity panelist and men's program audience member from Kuujjuaq , Nunavik (Northern Quebec).

Photo © Ed Maruyama

Food for Thought

How could a “communication for social change model” be applied to rural sanitation work in the arctic?

The wonderful world of K*

What is **K***?

- **Knowledge Transfer (KT)**
- **Knowledge Transfer & Translation (KTT)**
- **Knowledge Mobilization (KMb)**
- **Knowledge Transfer and Extension (KTE)**
- **Knowledge to Action (K2A)**

K* Synonyms

- Continuing Education
- Research Utilization

- Knowledge:
  - Dissemination
  - Diffusion
  - Implementation

Source: Graham et al. 2006

Relevant Definitions of K*

- **SSHRC:** "'moving knowledge into **active service** for the **broadest** possible common good' where knowledge is research findings, accumulated knowledge of researchers, or accumulated knowledge of stakeholders with related issues."

- **CIHR:** "**Dynamic and iterative** process that includes synthesis, **dissemination**, **exchange** and ethically-sound **application** of knowledge to improve the health of Canadians, provide more effective health services and products and strengthen the health care system."

Rationale for K* in Science

- Research knowledge is underutilized by practitioners and policy makers
- Research takes up to **30 years** to reach the general population
- *Is it accessible to users and policy-makers??*
- How can we improve that?

Source: Anderson et al. 1999;
Lavis et al. 2005; Graham et al. 2006; Bowen et al. 2009)

Slide adapted from Ian Young and Andrijana Rajic

Barriers to K*

- Barriers towards integrating evidence into practice and policy
  - Time and resources
  - Skills and training
  - Leadership and organizational capacity
  - Availability and quality of evidence (including too little but also too much information)
  - Contextual and political environment
  - Communication and collaboration

Source: Anderson et al. 1999; Lavis et al. 2005; Graham et al. 2006; Bowen et al. 2009)

Slide adapted from Ian Young and Andrijana Rajic

So what have we learned?

EDITORIAL

Sanitation and Public Health: A Heritage to Remember and Continue

Carolini's research article about public vulnerabilities to unsanitary conditions in Maputo, Mozambique reminds us that more than a billion people lack basic sanitary services that North Americans and most Europeans have taken for granted for more than a century.[1] She focuses on variations in public understanding of sanitation's four A's (adequacy; accessibility; affordability of water, sanitation facilities, and waste management; and awareness of disease outcomes and hygiene practices) as contributors to sanitation-related mortality and morbidity. Unsanitary conditions in Maputo—caused by inadequate infrastructure and staff to manage the systems, as well of a lack of public knowledge are mirrored in poor neighborhoods and rural areas in much of the global south. In this editorial, I revisit the commendable contribution of the *American Journal of Public Health*® (*AJPH*) to the sanitary movement and describe today's international challenges.

During a hygiene promotion campaign, residents of Cap Haitien, Haiti, are taught proper hand washing to avoid cholera infection. Printed with permission of Corbis.

SUCCESS IN SANITARY PRACTICE IN THE UNITED STATES

AJPH published more than 230 articles, editorials, and book reviews about sanitary practices during the 1911–1960 period, and that effort was needed. The last cholera epidemic in the United States started more than a century ago in Asia. In 1911, the steamship Moltke (Hamburg, Germany, to New York City) brought infected people to New York City. The small public health community responded quickly, isolating the population on Swinburne Island (a tiny island just east of Staten Island in the New York Bay).[2] Eleven people died, including a health care worker. This episode should be distinguished from others in which quarantine was used as an instrument to reinforce xenophobic values.[3] It comes as no surprise that the first article in the first issue of *AJPH* in 1911 was about controlling the spread of cholera,[4] and the first decade of the *Journal* was marked by 90 publications about the rapid development of industrial hygiene and sanitary practices associated with industrialization, urbanization, and internationalization, and more specifically the demands of the First World War,[5] the newly opened Panama Canal Zone, and rural areas.

The 1920s and 1930s saw a decrease in the number of articles about sanitation and a shift in focus from battlefields and barracks to recreation (tourist camps, resorts, summer camps, swimming pools, playgrounds) and schools. Articles focused on foods and beverages of every variety (ice cream, fruits and vegetables, bottled beverages, oysters, fish, livestock) and the places that served them (kitchens, bakeries and restaurants). The 1940s and 1950s included 2 wars, an economic depression that gave way to unprecedented economic growth, and the beginning of postwar suburban-oriented America. Sanitary-related war issues temporally returned, including special problems associated with sanitary conditions in South Pacific. With the end of the war, restaurants, schools, hospitals, and rural areas reappeared as the focus. The *Journal* emphasized the need for training to inspect and record data about sanitary conditions.

By 1960, the US sanitary movement was institutionalized. In 1949, Wolman summarized key accomplishements.[6] He reported that 85 million US

So what have we learned?

- Build on what we (and others) know
- Work as a team
- Engage community in as many aspects as possible
- Reflect on our practice
- Other?

Additional Social Marketing Resources

Some general resources

- Books*
  - Lee, N. R., & Kotler, P. (2011). *Social marketing: Influencing behaviors for good* (4th ed.). Thousand Oaks, CA: SAGE.
  - McKenzie-Mohr, D. Fostering Sustainable Behavior. Available online www.cbsm.com
- Papers*
  - Grier, S., & Bryant, C. A. (2005). Social marketing in public health. *Annual Review of Public Health, 26*, 319-339.
- Periodicals
  - Social Marketing Quarterly
  - Journal of Social Marketing
- Online resources*
  - http://socialmarketing.blogs.com/r_craiig_lefebvres_social/
  - http://www.cdc.gov/healthcommunication/cdcynergy/index.html
  - www.cbsm.com (also a listserv) Doug McKenzie-Mohr, "environmental psychologist"
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*see me for details

Sanitation-specific resources

- Cairncross, S. (2004). The case for marketing sanitation. *WSP-AF (Water and Sanitation Program for Africa) Field Notes, Nairobi, Kenya.* Retrieved from http://www.wsp.org/publications/af_marketing.pdf .
- Devine, J. (2010). Sanitation marketing as an emergent application of social marketing: experiences from East Java. *Cases in Public Health Communication & Marketing*, *4*, 38-54.
- Devine, J., & Kullmann, C. (2011). Introductory guide to sanitation marketing. Retrieved from https://openknowledge.worldbank.org/handle/10986/17352 .
- Dickey, M. K., John, R., Carabin, H., & Zhou, X. N. (2015). Program Evaluation of a Sanitation Marketing Campaign Among the Bai in China A Strategy for Cysticercosis Reduction. *Social Marketing Quarterly*, *21*(1), 37-50.
- Dreibelbis, R., Winch, P. J., Leontsini, E., Hulland, K. R., Ram, P. K., Unicomb, L., & Luby, S. P. (2013). The Integrated Behavioural Model for Water, Sanitation, and Hygiene: a systematic review of behavioural models and a framework for designing and evaluating behaviour change interventions in infrastructure-restricted settings. BMC Public Health, 13, 1015. http://doi.org/10.1186/1471-2458-13-1015
- Jenkins, M. W., & Curtis, V. (2005). Achieving the 'good life': Why some people want latrines in rural Benin. *Social science & medicine*, *61*(11), 2446-2459.

Additional CBPR Resources

Additional Resources

- http://www.lgreen.net/guidelines.html
- Wallerstein, N, Duran, B, Oetzel, J and Minkler M (Eds) (2018) Community-Based Participatory Research for Health: Advancing Social and Health Equity (3rd Ed). Jossey-Bass. ISBN: 978-1-119-25885-8
- Developing and Sustaining Community-Based Participatory Research Partnerships: A Skill Building Curriculum. Online course freely available at: https://depts.washington.edu/ccph/cbpr/index.php
- Community-Based Participatory Research: A Partnership Approach for Public Health. Online course freely available from Michigan Public Health Training Centre at: http://miphtcdev.web.itd.umich.edu/trainings/courses/community-based-participatory-research-partnership-approach-public-health-downloadable

Examples of Participatory Projects

- Youth Action Institute (Youth Researchers)
- https://www.youtube.com/watch?v=NOW86_zy7s0&feature=related
- Project Life, Maniilaq
- http://www.isuma.tv/en/naasautit/project-life

Examples of Participatory Projects

- Alaska Native Tribal Health Consortium (ANTHC) Cancer Education Program
- http://arctichealth.nlm.nih.gov/multimedia/224/health_and_healing

- Pan Arctic Inuit Wellness TV Series Evaluation 2009
- http://www.naho.ca/wellnessTV/aboutus.php

Thanks!

rmjohnson2@alaska.edu