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CULTURE, MEDIA & FILM | CRITICAL ESSAY

Public health programming to accommodate the heterogeneity of youth and the complexity of behavior change

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Abstract: The word “youth” masks enormous heterogeneity in the population. Public health practitioners have used several approaches to disaggregate and segment the youth population, tailoring messages to targeted audiences. But, messaging may not touch significant aspects of youth’s heterogeneity. The idea of creating a “message” remains tied to the idea of the collective rather than personal circumstances, and, alone, is not sufficient to address the complexities of behavior change. Beyond messaging, many have argued for narratives as vehicles for delivering nuanced information, yet these narratives are often used to educate and inform, rather than spur reflection. Alternatively, we argue that narratives used in behavior change interventions for adolescent and youth sexual and reproductive health should be developed as “inkblots”—intended to pull information from individuals to stimulate private and social reflection rather than push messages to them. We use the University Leadership for Change program in Niger to demonstrate how inkblot narratives place the responsibility for tailoring stories and messages into the hands of individuals themselves, resulting in reflection, dialog, and action with the potential to spur positive changes in sexual and reproductive health behaviors.

ABOUT THE AUTHORS

The authors—coming from different disciplinary fields, such as Rhetoric, Psychology, Public Health, Anthropology, and Social Sciences—but all working in development and public health proposed this manuscript based on their common experience working with young students, health providers and Government on the University Leadership for Change (ULC) Program in Niger. ULC was supported through the Evidence to Action (E2A) Project, USAID’s flagship global project for strengthening family planning and reproductive health service delivery. The evidence in the manuscript, which focuses on social and behavior change for improved adolescent and youth sexual and reproductive health, contributes to the body of knowledge E2A has generated on responding to the diverse needs and perceptions of youth, considering gender differences, social and cultural contexts, as well as provider’s perspectives about contraceptive service provision for youth.

PUBLIC INTEREST STATEMENT

Programs designed to encourage behavior change are a core feature of many public health interventions. A problem, however, is that behavior change is highly personal and that public health interventions target populations such as “youth” which are very heterogenous. The tension therefore arises as to how to encourage young people to think about their behavior change in personal ways—being, at the same time, part of a group and individuals living in specific contexts. Narratives are commonly used in public health, but we argue that the best kind of narrative is one that functions as an “inkblot”—an open-ended narrative that does not tell the audience what the “correct” behavior should be, but instead invites them to impose their own interpretation. Using narratives as inkblots rather than a system to deliver predetermined messages can resolve the tension between having to use a “mass media” approach and yet tailor it to personal experience.

Subjects: Social Constructionism; Social Influence; Group Processes; Persuasion; Rhetoric; Group Communication; Health Communication

Keywords: public health; adolescent and youth sexual reproductive health; youth leadership; narrative; behavior change

1. Engaging with the diversity of youth

Social and behavioral change (SBC) as it relates to adolescent and youth sexual and reproductive health (AYSRH) is currently receiving a good deal of attention. Young people, ages 10–24, now comprise 25 percent of the global population (Das Gupta et al., 2014). It is widely known that addressing the sexual and reproductive health (SRH) and rights of young people is essential to achieving national and international development goals—yet programs designed to do just that continue to fall short. Young people around the world still have extremely limited access to SRH services and programs that address their unique needs and situations. For this reason, their access to contraceptive counseling and services in many countries is still extremely limited. An estimated 33 million young women aged 15–24 across 61 low- and middle-income countries have an unmet need for contraception (MacQuarrie, 2014). Many young women bear children early and often, trapping them in cyclical poverty, leading them to seek abortions, and risking their health and the health of their children. Young people also account for a high proportion of HIV cases—more than 34% of people living with HIV infections globally are 15–24 years old (Joint United Nations Program on HIV & AIDS, [UNAIDS], 2016).

When applying the behavioral ecological model to different SRH outcomes for youth, a wide range of barriers are evident, reflecting the scope of the challenge public health practitioners have before them. A lack of laws and supportive policies, physical distance from health facilities, cost of services, and shortages of commodities hinder access to SRH services. Young people's own limited knowledge of their SRH needs, and where and what services are available, are limiting factors. Additionally, social stigma driven by a fear of being seen when seeking services and negative community perceptions inhibit access to and uptake of services.

Reaching the burgeoning youth population with information about high-quality SRH services is not enough to overcome these challenges. Young people must have the mindset and agency that will spur them to seek services and enable them to adopt behaviors that can lead to improved SRH outcomes. Engaging effectively with young people and their immediate communities around SRH is therefore paramount to encouraging changes in behavior that can improve their life chances and choices.

Despite its diversity, public health professionals have often treated “youth” as a collective noun and assumed we could apply “youth-friendly” solutions. Designing effective SBC approaches for AYSRH programs—which deal with sensitive topics and often seek to change deeply rooted norms and taboos—requires that we recognize the heterogeneity of youth. Young people—as individuals—live in different social, economic, religious, and cultural realities, and they have varying degrees of access to education, health, and other social services. Some are married, others are unmarried. Many are sexually active, but many others are not. Some young people are already with children of their own, whereas others are not. But even within groups of young people sharing demographic characteristics—young married women, for example—there is a great amount of individual variation. Though commonalities certainly exist, the experience of one 16-year-old wife and mother living in a rural area with a co-wife is completely different than another 16-year-old mother living in a same area. Each individual's SRH experience is different, which affects their aspirations, capacities, knowledge, social relationships, life choices, resilience, and ultimately, outcomes for their health and well-being.

2. Disaggregation-segmentation approaches to tailored messaging

In response to the complexity of the youth population, public health practitioners see the clear need to tailor their programs to accommodate the heterogeneity of youth. Long practiced in social marketing approaches to behavior change, the public health field has applied increasingly sophisticated approaches to disaggregate and segment populations (Cohn et al., 2017; Dietrich, Rundle-Thiele, Leo, & Connor, 2015; Lotenberg, Schechter, & Strand, 2011; Maibach, Leiserowitz, Roser-Renouf, & Mertz, 2011). Disaggregation-segmentation is premised on the assumption that entire segments of the youth population need similar information, are under basically similar social constraints, and experience SRH issues in an essentially similar manner. But this reinforces, perhaps, the fact that we are still more interested in how we tailor/market information to young people rather than how young people adapt information to their personal circumstances. These informational approaches to behavior change, even when tailored to a segment of the population identified through surveys and other social marketing approaches, are still directed “at” young people with widely divergent needs, perceptions, and life experiences.

Segmenting youth into different archetypes proves useful when applied to certain research objectives and especially when the goal is to target broad swathes of the population with messages. In such cases, working with disaggregated-segmented populations may suggest images, relationships, ideas, and ideals that might prove most effective with this group and opens opportunities for small group activities engaging shared knowledge, beliefs, access to services, and demographics. But while archetypes are useful in developing materials and activities that deliver message-based information and education communication (IEC) to “people like this,” they do not address the fact that the individuals have fundamental differences that may, in fact, outweigh their similarities in terms of behavior. Individuals will differ in what they have learned from any prior sexual health-related experience; how their personal relationships with parents, friends, and others influence their sense of how and whether change is desirable or possible; how their personalities lend themselves to change, their differences in cognitive style, life aspirations and motivation, and on and on. Therefore, to address public health problems, programs need to include approaches that go beyond the traditional demographic-based analysis. Strategies will need to reach individuals in the way they experience the social and cultural norms, in the way they perceive what is healthy or risky, in the way they uniquely respond to their needs and constraints.

3. Narrative approaches to behavior change

While messaging and IEC remains an important part of any behavior change approach, some public health practitioners have increasingly recognized that such approaches are usefully complemented by the use of narratives to create denser, more interactive and engaging vehicles for change (Nan, Futerfas, & Ma, 2017; Slater & Rouner, 2002). Unlike messages designed to deliver information in isolation, narratives weave behavior-related cognition, affect, values, contextual cues, and social arrangements into characters, chronologies, and cause-effect relationships that address the complex behavioral needs of youth more realistically. A narrative, by definition, is the chronological linking of character interactions within a context-dependent plot (Mattingly, 1998). Built upon human interaction and the fundamental ways we perceive information and acquire knowledge, narratives have the potential to motivate and support health behavior change in a far more engaging and three-dimensional way than do message-focused, informational and educational approaches. Narratives are a natural—and perhaps, the most distinctively human—form of conveying contextually rich information (Fisher, 1987; Petraglia, 2007, 2009). Narratives are the basis for street theater, entertainment-education vehicles such as soap operas, testimonials, non-serial radio and television spots, and, increasingly, interactions mediated by mobile technologies. The use of narratives, rather than messages, maybe useful to spur individual reflection and action. But not just any narrative. Narratives in public health can, arguably, be made to function in at least three distinct ways: as ads, parables, or as inkblots. As we will suggest, it is the last function of narrative—the inkblot—that might best be used to address the heterogeneity of youth.

3.1. Ads

Narratives that function as advertisements, or ads, intend to make information memorable. Whereas people may walk by posters or ignore public service announcements, good storytellers, using media ranging from street theater to televised serials, can attract and keep an audience. Narratives that function as ads are therefore vehicles for sharing information and education—the IEC approach to health communication. The narrative structure of the ad creates multiple cognitive pegs that promote recall by associating health information with plots, characters, and chronologies. Entertainment-education approaches adopted by many organizations provide good examples of how stories embed information in ways that popularize information and create a context for the information’s application that maybe lost in more traditional message-based practices.

3.2. Parables

In addition to ads, narratives are often used to model positive and negative behaviors. What might be called narratives-as-parables hope to both harness and shape the social norms that encourage healthier behaviors (Greenland & Skuse, 2015). When people make sense of the costs and the benefits associated with change they are sometimes encouraged to reflect and change their behaviors or values. Stories used as parables connect an audience’s situation to the normative context of right and wrong, show the consequences of healthy and unhealthy behavior, and model ways of problem-solving. They link people’s ability to reflect upon their own aspirations through the lens of social acceptability and behavioral expectations. As Jerome Bruner argues, narrative is a “natural vehicle” for stimulating change as it “mediates between the canonical world of culture and the more idiosyncratic world of beliefs, desires, and hopes” (Bruner, 1990). When narratives deliver information in the form of a parable that may provide a kind of instruction through role modeling and can be reinforced through other interpersonal and group activities (Galavotti, Kuhlmann, Kraft, Harford, & Petraglia, 2008; Greenland & Skuse, 2015).

3.3. Inkblots

Narratives used as ads and parables are distinct from IEC and messaging in many ways, most obviously, perhaps, in their structure. Still, like messages, narratives that function as ads or parables tend to push information to the audience. A third way in which narratives can be used—as inkblots—is very different, however. Hermann Rorschach pioneered the use of inkblots in psychology in the middle of the last century to stimulate reactions from patients that may otherwise go unarticulated (Exner, 2003). Unlike ads or parables, narratives that function as inkblots are, by design, ambiguous (Garb, Wood, Lilienfeld, & Nezworski, 2002). They “pull” information from the audience rather than “push” information to the audience, and encourage individuals to make sense of their story drawing on their own experiences. Inkblots allow audience members to project their own doubts and questions, rather than having to follow or repeat a prescriptive message, idea, or model. When well designed, they can give individuals a sense of personal connection related to the story being told. Using stories to elicit interpretation rather than deliver information is especially useful when the issues are behavioral and the communities’ behaviors are not well understood.

So how is the inkblot narrative especially useful in addressing the heterogeneity of a given population? Cognitively, inkblots encourage young people to tap personal schemas built and reinforced over years, rather than set aside those schemas to make way for completely new and possibly inauthentic information. Inkblot narratives do not appeal to youth as representatives of a demographic, but as individuals and as part of a social-cultural group.

While it maybe easy to recognize the use of narratives as ads and parables, it maybe less common to observe how narratives may function as inkblots. As suggested below, this is unfortunate as inkblots can, in fact, play a unique role in facilitating behavior change. The recently completed University Leadership for Change (ULC) Project in Niger nicely illustrates how the idea of using narrative as inkblots provided a foundation for a comprehensive AYSRH program.

4. Inkblots in action: The university leadership for change program in Niger

The ULC project used the inkblot narrative as part of its comprehensive behavior change strategy for youth. The project, implemented from March 2014 to June 2016, in Niamey, Niger, was led by Pathfinder International through the E2A Project. The ULC approach was subsequently scaled up to three additional regions in Niger: Maradi, Tahoua, and Zinder using the ExpandNet scale-up methodology. The objective of the ULC project was to promote youth leadership to drive social change and health systems strengthening with the aim of reducing unintended pregnancies and maternal mortality, and increasing gender equality. The project was composed of three main components: (1) Youth leadership and demand generation; (2) Expanded access and improved quality of SRH services; and (3) Participatory stakeholder engagement for sustainability.

From the beginning, the ULC project chose to use behavior-change strategies that were less IEC (Information and Education Communication) based and more focused on how individuals and groups perceived their distinct SRH behavioral challenges. These challenges had as much to do with individuals' prior experience in SHR, social relations and norms as lack of knowledge and it was determined that narrative formats—and specifically narratives that functioned as inkblots—would play a central role.

The ULC comprehensive approach to behavior change sought to create an enabling environment to improve AYSRH. The project used two tools, *Pathways to Change* and *Reflection and Action for Change (REACH)*, as a means of developing and deploying inkblot narratives. Both tools were designed to stimulate debate and elicit perceptions about barriers and facilitating factors to improve SRH and then to translate that public and private reflection into incremental, yet important, actions as a prelude to broader change. The tools were used by the ULC project to invite young people's reflections on various barriers and facilitators that characters in video-based narratives were experiencing when making decisions about their reproductive lives. The scenarios highlighted the characters' doubts, wishes, fears, and ambitions, without suggesting a "right" way to resolve the situation.

As part of this comprehensive approach, health providers and supervisors were updated in contraceptive methods and in youth-friendly services as well as in the behavior change strategies. The peer leaders were trained in AYSRH information and services as well as on how to facilitate behavior-change activities using the two tools described above. The training focused on building peer leaders' skills to guide behavior-change activities without being directive. They were asked to help their peers make sense of the scenarios presented in the tools in the context of their own concerns and experiences, prompting these private and sometimes public reflections to become positive actions toward improving their SRH. Using these methods, the peer leaders generated demand for SRH services among their fellow students on campus and in communities across Niger.

In total, over 202 university students were trained as peer leaders and through them, more than 8000 young people were reached with ULC activities nationwide. Moreover, the project improved the relationship between students and the AMU university health center staff, resulting in improved quality of SRH services for young women and young people in general. The project also introduced contraceptive services for the first time at the AMU health center and built the capacity of health providers to offer youth-friendly SRH and contraceptive services. Around 80,000 condoms were distributed, 712 students received SRH/family planning counseling and 61 students received contraceptive methods at the university health center. A welcome yet unexpected outcome was that students involved in the project created and registered a youth-led NGO on their own initiative to continue the ULC approach beyond the lifespan of the project.

4.1. Assessment methods

The implementation of the three-pronged approach of the project was monitored and evaluated through quantitative (routine service provision data) and qualitative methods. In the later, the ULC project conducted 27 focus groups in Niamey—10 groups with peer leaders and 17 groups with other students, reaching a total of 130 youth. In the three other regions out of Niamey, 6 groups of peer leaders—two by region were conducted. All groups were disaggregated by sex.

In addition, at the end of the project, 12 peer leaders (7 male and 5 female) were selected in a convenience sample to engage in in-depth interviews. Qualitative data generated from these focus groups and interviews demonstrated that the use of inkblot narrative approaches in ULC helped youth leaders to influence positive behavior change among their peers.

The peer leaders found that the open-ended, non-directive format of presenting scenarios in the videos created a more relaxed and engaging space for private and public reflection, interpretation, and interactive dialog.

They [the open-endedness of the videos] is what really encouraged discussion. If no solutions are given, this will encourage dialogue and questions.

–Male peer leader (age 21) at Abdou Moumouni University in Niamey

They [the videos] helped the conversations a lot. The videos are all about problems, so to find a solution, we must have a discussion. If the videos were to already provide solutions, they wouldn't encourage questions and debates.

–Female peer leader (age 20) at Abdou Moumouni University in Niamey

Peer leaders noted that the inkblot approach of the ULC tools enabled them to address diverse needs of different groups of young people. For example, youth leaders in Zinder noted that using the ULC tools helped them to better understand the range of perceptions, concerns, and questions that different groups of participants had about SRH issues. As a result, they were able to adapt their behavior-change activities to meet these heterogeneous needs.

Amongst students, girls tend to understand how the scenarios relate to their lives faster than boys. With boys, we have to different ways of presenting the scenarios ... it's also different with young married women in rural areas ... everyone has their own way of interpretation

–Male peer leader (age 22) at Zinder University

Peer leaders observed that the inkblot narrative approach contributed to positive changes in attitudes and behaviors among young people.

Personally, I noticed a lot of changes in our youth. This is especially true for young Nigeriens and young Muslims—previously, they would not communicate their feelings or problems because of taboos. However, through these videos people began to be more open. Our health center brought in a midwife so that young women could talk about SRH.

–Female peer leader (age 20) at Abdou Moumouni University in Niamey

For the girls that we reached...they are now able to express themselves amongst their peers and they are even more able to go to the infirmary without feeling embarrassed, they can express themselves without shame to discuss their problems.

–Female peer leader (age 20) at the Zinder University

The youth took measures –it's been more than two years since we haven't seen a single student with an unintended pregnancy. In terms of infections, more women are asking for information and infections have decreased significantly.

–Female peer leader (age 21) at Abdou Moumouni University in Niamey

However, it is important to note that introducing an inkblot narrative approach in Niger was not without its challenges. When the first ULC narrative, the video *Binta's Dilemma* (Evidence to Action Project, 2015), was initially presented to stakeholders in Niger, their reaction revealed much about the novelty of using narratives as inkblots. Chief among concerns was that they felt *Binta's Dilemma* failed to provide comprehensive and accurate information about the contraceptive and SRH options that young people should choose. This implied that they believed the purpose of videos—and the use of narrative more broadly—should be informational and directive. Many stakeholders had expected more of a “parable,” whereby “correct” behaviors would be demonstrated and negative behaviors would be pointed out. In Niger, it was therefore evident that stakeholders were more familiar with narratives that function as ads and parables, and were less comfortable working with inkblot approaches. Thus, we see that positive reception of inkblot narratives often requires a mind-shift: from believing that narratives must deliver messages about tangible “truths” vs. “myths” and “rights” vs. “wrongs” to believing that non-prescriptive, non-judgmental narratives can be the most effective tools for prompting changes in behavior. Notably, inkblot narratives, such as *Binta's Dilemma*, require a skilled facilitator, who can keep dialogic space open, evoke personal experience, and invite reflection.

5. Conclusion

Messaging may not touch on the most significant aspects of youth's heterogeneity because informational approaches—including those that use narratives as ad and parables—remain tied to the idea of the collective rather than to personal circumstances. While audience-segmentation and informational approaches conveyed through messages are certainly a powerful tool in any public health communication repertoire, they are usually not designed with the heterogeneity of youth in mind. Something we all know, yet frequently forget when designing programming, is that each member of youth population is inherently unique. To elicit behavior change or productive conversations that can lead to behavior change, it is essential to know the population with which you are working, but moreover, to develop stories that allow individuals to project their own aspirations and understandings even when they are not articulated publicly.

The ULC project in Niger illustrates how narratives, when used as inkblots, place the responsibility for tailoring stories and messages into the hands of the individuals themselves. The use of inkblot narratives in behavior-change interventions has the potential to address the complex behavioral needs of the inherent heterogeneity of youth. Narratives that weave behavior-related cognition, affect, values, contextual cues, and social arrangements into characters, chronologies, and causality, carry the potential to address the complex SRH behavioral needs of youth. The ULC experience demonstrated that the use of inkblots maybe considered novel by many stakeholders, but that the peer leaders, who served as implementers, and the groups of students they engaged, readily saw the benefits in not being told what to think about SRH. They were instead invited to make their own connections. Ultimately, these associations, we suggest, contribute to the power of narrative to foster meaningful behavior change.

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