SOCIAL ENTREPRENEURSHIP FOR SEXUAL HEALTH (SESH)

CONTINENT — Asia

COUNTRY — People's Republic of China

HEALTH FOCUS — HIV, Sexually Transmitted Diseases

AREAS OF INTEREST — Crowdsourcing, Health education, Health research, Community mobilisation

HEALTH SYSTEM FOCUS — Service delivery

SOCIAL ENTREPRENEURSHIP FOR SEXUAL HEALTH (SESH), CHINA

Leveraging and testing social entrepreneurial approaches, such as crowdsourcing, to encourage use of sexual health services and to reduce the stigma surrounding sexual health for marginalized populations in China.

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CONTENTS

ABBREVIATIONS

ART	Antiretroviral therapy
CBO	Community-based organization
CCC	Creative contributory contests
CDC	Centre for Disease Control
FSW	Female sex workers
HIV	Human Immunodeficiency Virus
LGBTQ	Lesbian, gay, bisexual, transgender and queer
MSM	Men who have sex with men
NGO	Nongovernmental organization
NIH	National Institutes of Health
RCT	Randomized controlled trial
SESH	Social Entrepreneurship for Sexual Health
STD/I	Sexually transmitted diseases/infections
US$	United States dollar

CASE INTRODUCTION

The SESH (Social Entrepreneurship for Sexual Health) project is a multi-sectoral research collaboration led by the Guangdong Provincial STD Control Center and the University of North Carolina Project China. The main goal of SESH is to leverage and test social entrepreneurial approaches, such as crowdsourcing, to enhance sexual health services. It operates from a belief that the generic messages that have been developed "top-down" by experts could be replaced by "bottom-up", tailored, custom-centered, locally appropriate messages using diverse, creative inputs. Launched in 2012, SESH runs open creative contributory contests (CCCs) to crowdsource messaging in response to proposed themes such as HIV testing, condom use and sexual health awareness. SESH's CCCs involve a four-step process. The contest is launched as an open nomination call around a specific theme, submissions are received, judging occurs (from a panel of experts and from an open community vote), and the finalists' images or videos are announced. These contests form the basis of research projects to evaluate the effectiveness of the crowdsourced materials in comparison with expert-developed materials. As a research collaboration, SESH has collectively published over 25 articles in peer reviewed journals.

The SESH case study illustrates how contributory crowdsourcing contests can be a mechanism to engage the views and experiences of stigmatized patient groups. By encouraging open and inclusive participation, these contests allow for the creation of more culturally appropriate and non-judgmental health promotion messages. CCCs increase community engagement from a broad range of non-experts, including key affected populations, experience-rich leaders, and creative individuals.

Contests have additional benefits: 1) the contest itself educates and sensitizes those who participate; and 2) crowdsourcing community contributions are more affordable than a professionally designed health campaign. This case study also highlights the opportunity for researchers and academics to assess the outcome and impact of social entrepreneurship approaches to improving health, as adopted across different geographical contexts.

"Most of the social marketing campaigns and the guidelines-driven approaches are very focused on the experts knowing what's best for a community but what we found in China and in many middle-income countries is that the experts often don't know what people want on the ground, what gay men and other marginalized groups want and so what's really innovative about SESH is taking the wisdom of the crowds … their preferences and attitudes and having those preferences and attitudes shape the messages that would be used to promote HIV and syphilis testing." (Dr Joseph Tucker, Co-founder, SESH)

World Health Organization

TDR — For research on diseases of poverty
UNICEF · UNDP · World Bank · WHO

B — GRADUATE SCHOOL of BUSINESS
UNIVERSITY OF CAPE TOWN
BERTHA CENTRE

LONDON SCHOOL of HYGIENE &TROPICAL MEDICINE

SKOLL CENTRE FOR SOCIAL ENTREPRENEURSHIP | SAID BUSINESS SCHOOL | UNIVERSITY OF OXFORD

SOCIAL INNOVATION IN HEALTH INITIATIVE

1. INNOVATION PROFILE AT A GLANCE

Project Details

Project name	Social Entrepreneurship for Sexual Health
Founding year	2012
Founder name	Joseph Tucker (American)
Organizations involved	University of North Carolina Chapel Hill; Guangdong Provincial STD Control Centre
Organizational structure	Research programme
Size	19 employees, researchers and affiliated researchers

Innovation Value

Main value proposition	Leveraging and testing social entrepreneurial approaches, such as crowdsourcing, to encourage use of sexual health services and reduce the stigma surrounding sexual health for marginalized populations in China.
Beneficiaries	Main beneficiaries: young adults; men who have sex with men (MSM); and Lesbian, Gay, Bisexual, Transgender, Queer (LGBTQ) groups Other: community organizations; public health policy makers
Key components	• Local and global contributory crowdsourcing contests for user-centred sexual health messaging • Community-engagement workshops • Leveraging research to test the effectiveness of social innovation approaches for greater people-centred health care

Operational Details

Main income streams	Research grants
Cost considerations	Cost per client of 'Testing saves life' campaign versus traditional marketing: • First-time HIV test: US$ 131 versus US$ 238 per person • New HIV diagnosis: US$ 415 versus US$ 799 per person

Scale and Transferability

Scope of operations	SESH operates in the People's Republic of China, including Hong Kong SAR. It has also organized programmes in Vietnam and the United States.
Local engagement	• Community-based organizations • National STD Programme • Centre for Disease Control China
Scalability	Contributory crowdsourcing contests are scalable to any geographical location and applicable to any public health condition, especially in marginalized populations. Principles of contests should be adhered to (see Tables 1 and 2).
Sustainability	SESH uses research grants to implement and evaluate the programme's techniques and then partners with local organizations who are willing to adopt the campaigns. They are also developing social enterprises to increase sustainability and generate additional sources of revenue.

2. CHALLENGES

China is home to more than 1.36 billion people and accounts for approximately 20% of the total world population (World Bank, 2016). China has achieved rapid economic success, lifting millions out of poverty, partly through the internal migration of workers from rural to urban areas (World Bank, 2015). In 1982, only 21.13% of the country lived in urban areas; by 2009 45.68% of China's population were living in cities (Peng, 2011). China's economic growth and internal migration has also led to a growing commercial sex industry and a rise in unprotected sexual activity (Sudhinaraset, Astone & Blum, 2012; Wang et al., 2010). Sexually transmitted infections (STIs) have been recognized as a major public health problem in China, with high-risk groups identified as female sex workers (FSWs) and their clients, men who have sex with men (MSM), drug users and migrant workers (Chen et al., 2011).

The sociocultural context of sexual health in China is a major barrier to addressing the rise in STIs. Public discussions around sexual health and homosexuality are considered taboo (Lieber et al., 2009). Moreover, access to reproductive health services, specifically for adolescents who are increasingly engaging in premarital sex, is limited (Lim et al., 2015). When it is available, sexual health messaging tends to be old-fashioned and unengaging. Among available sources of support, the most often accessed are the internet and telephone hotlines. While these channels offer some anonymity, they are underutilized and unregulated, and the content is not always reliable (Lieber et al., 2009).

Although syphilis was eliminated from the country in the 1960s, it is now among the top three reported notifiable diseases (Chen et al., 2011), specifically among MSM, where there is a prevalence rate of between 8.2% (18-24 year olds) to 23.2% (50-69 year olds) (Wu et al., 2013). Between 2000 and 2010, HIV prevalence stabilized and started to decrease among high-risk groups, such as female sex workers and drug users. In comparison, HIV prevalence in MSM increased from 1.77% in 2000, to 5.98% in 2010 (Zhang et al.,

2013a). In 2013, syphilis-positive MSM had the highest HIV prevalence at 12.5% (Wu et al., 2013).

High-risk groups often delay testing and seeking treatment. By the end of 2011, despite efforts made by the government to facilitate universal access to HIV testing, 56% of an estimated 780 000 individuals living with HIV/AIDS in mainland China did not know their status (Ministry of Health, People's Republic of China, 2012). This is partly due to a lack of knowledge of where to go for a test, entrenched fear and concerns over a positive result, and a self-perceived low risk of HIV infection (Bien et al., 2015; Zhao et al., 2015; Zhang et al, 2013b). Among a transgender cohort, both HIV and syphilis prevalence was high, while testing rates were low (Best et al., 2015). Among a group of adolescent female sex workers, contact with government-led health services was avoided due to concerns over being found out as a sex worker, inconvenience, and lack of medical insurance (Zhang et al., 2015a).

When health care services are sought by people from these high-risk groups, judgmental and negative attitudes from health staff and concerns about privacy and confidentiality fail to engage and retain them (Zhang et al, 2013b), contributing to a significant drop off between CD4 screening and Antiretroviral Therapy (ART) initiation. Collectively, delayed linkage to health care services and suboptimal retention in care hinder effective ART, threaten individual patient outcomes, and contribute to continued HIV transmission (Lambdin, Cai & Udoh, 2012).

Existing approaches to sexual health and HIV testing promotion in China are inadequate. Social stigma and negative attitudes toward homosexuality hinder the effectiveness of traditional test promotion campaigns, specifically among MSM (Han et al., 2016) but also among other high-risk groups, including youth. Usually "top-down" and expert-driven, or delivered via government agencies (Li et al., 2009), conventional messaging campaigns fail to reach the communities most affected and often do not result in the necessary behavioural changes

(Zhang et al., 2015b). Programmes designed for high-income nations are often replicated in other settings without input from the target communities, and without taking cultural factors into account (Lieber et al., 2009). Even when information about these target communities is obtained, the methods (such as focus group discussions, and convenience sample surveys) have inherent limitations, are not always truly reflective of the key population and are difficult to scale up.

Generating appropriate, engaging and effective ideas for promoting sexual health, safe sex practices, HIV testing, and improving follow-up to care are important to address if the related disease burden and consequences are to be reduced. Locally developed sexual health interventions which prioritize ease of delivery have the potential to make important contributions towards improving HIV and STI outcomes within and beyond high-risk groups (Mendelsohn et al., 2015; Cheng et al., 2016)

3. INNOVATION IN INTERVENTION

The SESH (Social Entrepreneurship for Sexual Health) project is a multi-sectoral research collaboration led by the Guangdong Provincial STD Control Center and the University of North Carolina Project China. The main goal of the project is to leverage and test social entrepreneurial approaches, such as crowdsourcing, to enhance sexual health services. The project was launched in 2012 by Dr Joseph Tucker and consists of two main elements.

3.1. CREATIVE CONTRIBUTORY CONTESTS FOR SEXUAL HEALTH MESSAGING

Crowdsourcing is the process of obtaining ideas from a large group of individuals in order to help achieve a specific task. One mechanism by which crowdsourcing can be achieved is through open and inclusive public contests.

SESH's creative contributory contests (CCC) put out a nomination call where no parameters or examples are given beyond the prevailing theme. This aims to reduce cognitive fixation, where a preconceived notion places a limit on the number of fresh ideas generated and stifles creativity. The contributory nature of the contest aims to go beyond the conventional focus group approach and allows individuals, including those directly affected, to engage in the process and submit a meaningful image, concept or video from their own life and experiences.

SESH's CCCs involve a four-step process. The contest is launched around a theme; submissions are received; judging occurs (from a panel of experts and from an open community vote); and the finalists' images or videos are announced.

Most of the social marketing campaigns and the guidelines-driven approaches are very focused on the experts knowing what's best for a community but what we found in China and in many middle income countries is that the experts often don't know what people want on the ground, what gay men and other marginalized groups want and so what's really innovative about SESH is taking the wisdom of the crowds and the wisdom of gay men and their preferences and attitudes and having those preferences and attitudes shape the messages that would be used to promote HIV and syphilis testing. (Dr Joseph Tucker, Co-founder, SESH)

Four CCCs have been run since SESH was formally launched:

Testing Saves Lives contest

A contest requesting short video submissions was aimed at promoting HIV testing through community-based organizations (CBOs). The contest was launched in 2013 and promoted through direct contact with CBOs focusing on sexual health issues. As an incentive for participation, the best videos would be broadcast through local, regional and international platforms. In total, seven CBOs submitted a video during the eight-week contest. In December 2013, a panel of five judges from different backgrounds (academic, public health, media and medicine) selected three finalists based on the ability of their videos to

generate excitement about HIV testing, reach untested individuals and encourage community engagement.

Sex + Health contest

Leading up to World AIDS Day 2014, the Sex + Health image contest was launched. This contest aimed at involving young people in a discussion about the meaning and promotion of sexual health. Compared with the first CCC, this contest had a much wider audience (Chinese youth under 30) and the medium of submission was an image (or images) only. For the one-month duration of the contest, SESH promoted participation through events at local schools and universities and spread the word across various social media platforms (for example Wechat and WEIBO, a Chinese Twitter-like platform). In total, there were 96 submissions from 85 participants across 10 different provinces in China. Twenty judges from different sectors assessed each image and selected the Top Five, which were then put online for public voting on Wechat and the SESH website. On World AIDS Day, SESH held a public event at which the finalists were announced.

Condom Video contest

Launched in May 2015, this contest sought to promote consistent condom use. Similar to the Sex + Health contest, the SESH team organized a series of workshops as well as online engagement to promote the contest. The contest results have been announced and randomized controlled trial (RCT) data were being analysed at the time of research.

HepTest contest

Launched globally in 2015 in cooperation with the World Health Organization's Global Hepatitis Programme, SESH organized an open call for innovative descriptions of hepatitis B and C testing programmes. The contest received 64 entries from 27 countries. Finalists from this contest were invited to present at the International Liver Conference in April 2016 and several will be included in the forthcoming WHO Hepatitis Testing Guidelines.

The next contest planned will form the backbone of a research project focused on using crowdsourcing to promote HIV testing and linkage to care in South China. It will compare how an intervention arising out of a series of open contests, paired with formal judging, impacts behaviour in contrast to a conventional social marketing approach.

In addition to the four CCCs and research activities related to each contest, SESH has two other affiliated projects that it supports. The first, Sticky Rice Love (糖不甩, www.stickyricelove.com), is an online sexual health platform serving young people in Hong Kong. It aims to empower teens and youth in their twenties by providing them with accurate sexual health information. The initiative offers a safe space to discuss sexual issues and encourages conscious decisions regarding sexual health and behaviour. The second is a social enterprise, V-Med, offering online purchase of HIV self-testing kits to provide a new model for delivering point-of-care HIV and syphilis testing. Revenue generated from selling these test kits is reinvested to expand its testing programmes. It has been launched at five pilot sites across China (Wuhan, Chengdu, Kunming, Shanghai, Wuxi).

3.2. COMMUNITY AND STAKEHOLDER WORKSHOPS

While the submissions of these four contests are not currently being used by SESH in active sexual health campaigns and services, there are discussions around how these can be incorporated into future work. To promote the broader uptake of the content developed during the campaigns, SESH regularly conducts community and stakeholder workshops.

In a workshop SESH held with local CBOs in Guangzhou, there was a strong call for all of the materials to be made available to CBOs and NGOs to assist them in their outreach work. SESH is exploring the possibility of creating a repository of information, images and videos that local organizations can use. Currently, the top videos from the Testing Saves Lives contest are available on a public Chinese video platform for local public health groups to use to promote HIV testing. All finalists' images from the Sex + Health contest are available on the SESH website and can be downloaded and used in sexual health programmes.

4. IMPLEMENTATION

4.1. INNOVATION IN IMPLEMENTATION

Entrepreneurial approaches harnessing the wisdom of communities

SESH contests operate from a belief that the generic messages that have been developed "top-down" by experts could be replaced by "bottom-up", tailored, custom-centered, locally appropriate messages using diverse, creative inputs. SESH runs open CCCs to crowdsource messaging in response to proposed themes such as HIV testing, condom use and sexual health awareness. These form the basis of research projects to evaluate the effectiveness of the crowdsourced materials in comparison with expert-developed materials. CCCs increase community engagement from a broad range of non-experts, including key affected populations, experience-rich leaders, and creative individuals. Because of the heterogeneity of knowledge incubating in the crowd compared to the situation with experts, CCCs possess higher potential for innovation compared to conventional approaches (Tang et al., 2016).

SESH is really coming up with an entirely new model for delivering and designing sexual health services. The traditional model has been very top-down where experts and professionals design media campaigns and design resources to promote testing but the idea of SESH is to really turn that upside down and think about a community-based, a community-driven response to sexual health services. (Dr Joseph Tucker, Co-founder, SESH)

Leveraging the power of research

Fundamental to the SESH approach is research to determine the effectiveness of outputs generated through the contests. Since 2012, SESH has undertaken multiple research studies, both qualitative and quantitative, to assess the impact of crowdsourcing as a health promotion intervention method, and to evaluate the effectiveness of this approach. As a research collaboration, SESH has collectively published over 25 articles in peer reviewed journals and have been awarded an R01 Grant from the US National Institutes of Health, a key milestone for the collaboration. To evaluate the Testing Saves Lives video contest an RCT was used. For the Sex + Health image contest, mixed methods were employed. At the time of this case, research is about to begin on the recently completed Condom contest.

4.2. ORGANIZATION AND PEOPLE

SESH was co-founded by Dr Joseph Tucker in 2012 as a research collaboration between the University of North Carolina Project China and the Guangdong Provincial STD Control Centre. Dr Tucker began working on sexual health research 16 years ago in China after learning about how poverty in central China was driving a blood-borne HIV epidemic and how undiagnosed syphilis was a significant public health concern. SESH was formed in response to the need for more sustainable, entrepreneurial, and user-driven solutions in South China. During its launching, SESH held a series of workshops to build partnerships and reconsider potential solutions. The SESH team then undertook formative research among MSM and other key stakeholders, which highlighted the need for greater community engagement and ownership in sexual health programmes. Further debate led to the realization that open participation contests could be a powerful tool to enhance HIV testing campaigns by increasing community engagement and generating creative new ideas.

The SESH Global team consists of a multi-sectoral network of key populations, physicians, entrepreneurs, public health leaders, and young people who are all passionate about providing better sexual health services for marginalized groups. The organization is officially registered in Hong Kong and its Steering Committee oversees the progress of various country-level projects. SESH primarily operates through research activities, such as the launch and evaluation of CCCs as described above. SESH has 19 employees, researchers and affiliated researchers.

4.3 COST CONSIDERATIONS

SESH is mainly supported by research grant funding. Early SESH research was supported by Dr Tucker's Career Development Award from the NIH Fogarty International Center, a four-year US$ 529 000 research grant. Several workshops focused on promoting syphilis testing were supported by a Bill and Melinda Gates Foundation grant. In 2014, Dr Tucker, as principal investigator for SESH, received a five-year, US$ 3.1 million grant (NIAID 1R01AI114310-01, 2014-2019) from the United States National Institutes of Health (NIH). This grant provides support for the large eight-city RCT now underway, as well as related research. There is also a five-year NIH training grant for SESH to promote STD and HIV training in South China, providing short-, medium-, and long-term training opportunities for Chinese junior researchers. These programme grants have been supplemented by smaller grants to fund individual SESH researchers from the Doris Duke Charitable Foundation, the Fulbright Program, the Fogarty-Fulbright Program, the UJMT Fogarty Fellowship, the American Society for Tropical Medicine Burroughs Welcome grant, and the Rhodes Trust at Oxford.

5. OUTPUTS AND OUTCOMES

5.1. IMPACT ON HEALTH CARE DELIVERY

The Testing Saves Lives RCT (NCT 02248558) evaluated the effect of a contest-generated video among MSM in China. A non-inferiority study design was used. SESH recruited participants through banner links on web portal home pages, with the inclusion criteria that participants: 1) were born biologically male or were transgender; 2) have had anal sex with men at least once during their lifetime; 3) were older than 16; and 4) had never tested for HIV. The study randomized participants (n= 721) to view either the contest-generated video or a health marketing video. An analysis was then performed to determine their HIV test uptake and test results.

HIV test uptake was similar between the open participation contest arm (37%, 114/307) and the health marketing arm (35%, 111/317). Among those tested, 31% (69/225) received a new HIV diagnosis. The contest intervention cost substantially less than the health marketing intervention per first-time HIV test (US$ 131 versus US$ 238 per person) and per new HIV diagnosis (US$ 415 versus. US$ 799 per person) (Tang et al., 2016).

For the Sex + Health image contest, SESH used a mixed methods approach for evaluation (currently under review for publication). At the time of submission, participants completed a survey providing demographic data, how they had heard about the contest, and whether they self-identified as an expert in public health or health promotion. Most images (69%, 66/95) came from participants who learned about the contest during SESH events. The majority of images (85%, 82/96) were from individuals affiliated with university groups or community-based organizations. Some images (23%, 22/96) came from experts, although images from this group were less effective than images from non-experts (p<0.001), consistent with the wisdom of crowds hypothesis in such a context.

SESH has had success in allowing the content generated to be taken up by public and international health authorities. The SESH Sex + Health image contest was deemed to be so effective that the provincial public health authorities purchased the rights from the top finalist and scaled this up across 121 clinics throughout the entire province. Shandong CDC also used the top submissions from the Sex + Health image contest. The HepTest contest showed how innovation contests could be used to identify innovative programmes and directly inform global guidelines. This is a marked departure from conventional policy-making and could help to create multi-sectoral input into the guidelines process.

5.2. COMMUNITIES AND BENEFICIARIES

The beneficiaries of SESH are threefold. The first are the target communities for the sexual health campaigns. These are often marginalized and

hard-to-reach communities that have typically been underserved and face significant stigma. The aim of using crowdsourced materials is to achieve sexual health promotion and messages which are more accessible and engaging, and thus more effective in improving sexual health and behaviour and to reduce the stigma surrounding sexual health. *"I think the most common traditional method is advertising by publicity experts through educative posters to educate the public about STD control. But I think this isn't as effective because it's too generic. We need to promote it to a more targeted population."* (Director Huang, STD Control Department, Guangdong Provincial STD Control Centre) The second group of beneficiaries are the CBOs, NGOs and government facilities that provide sexual health related services. The aim is to provide available, ready-to-use content and a sustainable tool for developing appropriate and effective campaigns to address key issues such as HIV testing, linkage to care and safe sex practices. The third beneficiary is the broad group of organizations, institutions and policy makers who can access the research on crowdsourcing as a cost-effective and impactful way to approach health campaigns (even beyond sexual health).

SESH's work has been positively received by CBOs, university student groups, and the partner organizations with whom they engage. These communities appreciate having input in designing appropriate and engaging sexual health content, and generally believe that the method of crowdsourcing has much potential.

Good, it's good, because I watched some videos and pictures, they are designed by the community and students and it's very lovely and funny. Because in China many advertisements like testing and safer sex are almost all from government or CDC. Their design, it's not really professional, it's a little bit boring and very simple. (LGBTQ CBO representative)

During the workshops and interviews conducted, a number of suggestions were raised. These included: having a more centralized repository of crowdsourced materials for CBOs to use as they often do not have sufficient budget or expertise to create such materials themselves; making prizes more accessible (i.e., having a larger number of lower-value prizes rather than fewer higher-value prizes to promote participation); having a strategy to support the use of images and videos after the contests; putting more effort into increasing community engagement beyond the conclusion of a contest; encouraging greater involvement of CBOs in the design of the contest; making a more concerted effort to expand the target population; reaching more people; and creating more opportunities for collaboration between the different groups and individuals involved. *"Crowdsourcing is a good idea and creative idea comparing to the past experiences of government, but it just needs more resources at the execution to make the outcome of the single activity be more used in the community."* (LGBTQ CBO representative)

A critical perception of the contests was that, by awarding prizes based on the final product, an inherent barrier to entry was created for those who might have good ideas but do not have the technical proficiency to transform them into high-quality images or videos. This excludes lower-income and less-educated communities from participating, which is therefore not truly representative of important target communities. A suggestion was to hold a concept contest that selects finalists based on high-quality ideas rather than high-quality execution, to allow the submission of a wider range of entries (for example stories, voice notes, concepts for image series or videos).

6. SUSTAINABILITY AND SCALABILITY

Although primarily dependent on research grants, SESH is piloting a social enterprise initiative to generate revenue for sustainability. The team has started a small programme that sells high-quality, point-of-care HIV, syphilis, hepatitis B, and hepatitis C test kits. The revenue generated from sales of the tests kits will be re-invested for sustainability.

The open participation contest model is highly scalable and would be ready to implement in diverse settings and countries. Beyond HIV campaigns, a range of sexually transmitted infection campaigns and other behaviour-affected public health issues (diabetes, smoking, alcohol consumption) could benefit from open participation contests. SESH's model of tackling health problems is appropriate for resource-constrained contexts because it is low cost and focuses on community engagement, allowing for more tailored content. Open participation contests could be effective for accomplishing the following tasks related to infectious disease control: 1) generating new concepts to optimize community-based infectious disease control (idea contest); 2) developing health communication strategies to change behaviour and prevent infection (design contest); and 3) developing mobile phone applications to strengthen retention in infectious diseases care (hackathon or social innovation challenge). Table 1 captures SESH's core values for implementing CCCs, and provides some key elements for scaling crowdsourcing activities.

Table 1. SESH - core values for implementing CCCs

Common vision	Have strong local partnerships with vision alignment and common goals
Empowerment	Give agency to affected populations and community members
Networking	Provide a forum for horizontal collaboration and communication that escapes the vertical organization of traditional sexual health service delivery
Integrity	Establish partnerships and SOPs with a strong ethical foundation (no money from tobacco or arms sales)
Sexual health promotion	Recognize and respect an individual's sexual health
Multi-sectoral collaboration	Creatively engage a broad range of local stakeholders (business, academia, medical/public health, arts)
Innovation	Challenge assumptions and develop multidimensional approaches with novel tools for promoting sexual health
Compassion	Promote compassionate care as a basis for sexual health services
Diversity	Promote inclusive partnerships and an anti-discrimination policy
Open access	Share innovative ideas and materials with others
Social value	Deliver measurable social outcomes with value-added impact

Source: SESH Global (2016)

7. KEY LESSONS

7.1. IMPLEMENTATION LESSONS

A CCC needs to be undertaken in a thoughtful and well-planned manner. Table 2 captures the key lessons learnt in organizing creative contributory contests.

Table 2. Guidance for organizing CCCs for health

Stage	Guidance
Structure open participation strategy	Incorporate both in-person and online mechanisms for contributions. Identify optimal social media and conventional media strategies for promotion.
Establish contest prizes	Seek input from creatives and potential participants about appropriate prizes. Realize that showcasing finalists and using media promotion may be more attractive to creatives than monetary prizes. Consider prizes that have ancillary benefits to the individual or organization (e.g., making videos may increase capacity at CBOs for media campaigns).
Issue call for contest entries	Avoid giving examples of what you hope to receive. Explicitly state: "Send us your creative ideas". Include criteria for judging and be transparent.
Judge entries	Evaluate on an overall 1-10 scale instead of using subcategories. De-identify entries being judged and create a mechanism for judges to remove themselves in the case of a conflict of interest (where conflict of interest is defined as having any financial, organizational, or other interest that could be perceived as compromising their capacity to independently evaluate the entry). Potentially include a special prize for the crowd favourite, but do not have the entire contest evaluated by only the crowd because of unequal access to Internet voting and the tendency for dependent voting (e.g., voting based on social relationships and not entry quality).
Celebrate contributions	Include a range of prizes and avoid focusing exclusively on the finalist. Ask participants about continued engagement so that the end of the first contest is the beginning of a new co-created relationship. Acknowledge and thank the partner organizations, judges, and others who made the contest possible.
Sustain contributions	Create a series of contests so that individuals continue to contribute. Leverage social media to co-create a strong relationship between organizers and participants.

Source: Zhang et al., 2015b

7.2. OVERCOMING CHALLENGES

SESH has both local Chinese and international staff. Navigating cultural differences has been a significant challenge. One of the ways this has manifested is in the design of the CCCs. In theory, avoiding cognitive fixation is a central tenet of the contest design, yet Chinese culture favours clear specifications over open briefs. The lack of direction in the Sex + Health contest was identified as a deterrent by respondents in a qualitative study on the barriers and facilitators to participation.

I feel that Westerners have more generic thoughts whereas the Chinese have a more solid idea. When you interact with a Chinese, you should provide him or her with a specific goal or direction so that he has something to ponder on and come up with ways to tackle the task. So, the design for certain SESH activities can be more specific, less generic. When we were getting trained, the teacher criticized how strict Chinese people are at coaching and guiding people or

things. But, I think for SESH's purpose, some of the goals and guidelines can be more precise and explicit to make the task easier for others. (Director Huang, STD Control Department, Guangdong Provincial STD Control Centre)

When innovating in China, there may be initial challenges in using a new idea or method.

…crowdsourcing is such a new tool that when we talk about contests to stimulate innovation, this is a concept that is not only new to China, it's new within the field of public health so one of the big challenges has been transferring and understanding what the business and entrepreneur community has learned about crowdsourcing and then translating that into a public health context. (Dr Joseph Tucker, Co-founder SESH)

7.3. PERSONAL LESSONS

After co-founding SESH, a collaboration with a strong emphasis on the value of the wisdom of the crowd, Dr Tucker encourages others to look beyond the experts and actively engage the communities they are trying to reach: *"I would say, 'Don't listen to the expert.' It's one of the biggest lessons that we've learned is just [be] really humble and listen carefully to these crowd messages."*

We think it's important to be inclusive because within the field of sexual health it's always the people who've been left out of service delivery or not included in a formal facility-based programme, so it's gay men, it's transgender individuals, who are not the traditional target for a lot of sexual health services… if we can be very inclusive in how our organization runs, in how we define our mission then ultimately this inclusiveness will lead to improved public health outcomes, but not only improved public health outcomes, it's a different relationship between the service provider and the community so that it's not 'us versus them' but it's 'we, together' improving health. (Dr Joseph Tucker, Co-founder, SESH).

Dr Tucker also speaks about the importance of viewing and handling failure well as an innovator.

I do think the one lesson for innovators is this idea of what you do with failure. Is failure something that stops you or slows you down or is it just another lesson that you iteratively learn from to improve the concept… a lot of innovation I think is how failures are dissected and how failure is part of an iterative process.

CASE INSIGHTS

1. Contributory crowdsourcing contests are a mechanism to engage the views and experiences of stigmatized patient groups. By encouraging open and inclusive participation, these contests allow for the creation of more culturally appropriate and non-judgemental health promotion messages.

2. Contests have additional benefits: 1) the contest itself educates and sensitizes those who participate; and 2) crowdsourcing community contributions are more affordable than a professionally designed health campaign.

3. There is an opportunity for researchers and academics to assess the outcome and impact of social entrepreneurship approaches to improving health, as adopted across different geographical contexts.

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