Introduction

Prenatal exposure to alcohol can cause a range of lifelong physical, behavioural, and intellectual disabilities, collectively known as fetal alcohol spectrum disorders (FASDs). FASD is recognized to be an international public health problem. The prevalence of FASD is estimated to be as high as 2–5% in the USA and some Western European countries, with higher numbers in some areas of the world. Although FASDs are preventable by abstaining from alcohol use during pregnancy, one major obstacle to prevention around the world is the widespread lack of awareness and recognition of FASD. Increasing awareness about the risks of drinking during pregnancy is considered the first step towards FASD prevention.

Numerous approaches have been taken to raise awareness of FASD around the world, but only on a regional or national level. Few prevention campaigns have been systematically evaluated, so the effects of these campaigns are not clear. Therefore, an international network of partners coordinated by the European FASD Alliance, in collaboration with the National Organization on Fetal Alcohol Syndrome (NOFAS) and the European Alcohol Policy Alliance (EUROCARE), organized an international awareness campaign, called ‘Too Young to Drink’, that was launched on September 9, 2014, International FASD Awareness Day. The objectives of the campaign were: (1) to raise awareness of the dangers of drinking during pregnancy among women of childbearing age and in the general global population; (2) to spread accurate, research-based information on the risks of using alcohol during pregnancy; and (3) to connect the various entities working in the field of FASD all around the world, to share best practices and to create the basis for future collaborations and joint efforts. The campaign used theoretical models of social marketing applied to health promotion. These models are based on the concept of ‘value network’ and on the theory of ‘holistic marketing’. They develop the concept of ‘network’ and ‘relationship’ as factors that can give added value to health products (goods and services) for the community. The approach aimed to spread information among the general population, sharing ideas and using the power of the Internet and social media. The launch followed the methods of ‘guerrilla marketing’, a strategy borrowed from advertising,
which uses unconventional low-cost techniques to catch the attention and the emotions of the public towards an issue, e.g., by displaying or distribute materials in public spaces.5

The goal of this manuscript is to describe a unique public awareness campaign that was accomplished without finances and included untraditional partners from across the oceans. The manuscript outlines how social media brought small groups together, tracked how the campaign messages spread and helped to evaluate the dissemination and effectiveness of the campaign.

### Methods

The campaign was conceived by Fabrica, an international communication research centre based in Italy, who offered to donate their time and expertise to create the campaign image and video. Fabrica is an internationally recognized marketing and advertising agency that specializes in communication campaigns. The campaign vision was conceived by Fabrica for use by a local health Unit in Italy, called ‘Mamma Beve Bimbo Beve’ (Mum Drinks Baby Drinks).9 Successes from that campaign were considered to shape the larger effort. A cohort of FASD organizations gathered at an FASD international conference discussed a collaborative FASD awareness effort. Planning meetings were held via Skype and included the four major partners: the European FASD Alliance (EUFASD), the National Organization on Fetal Alcohol Syndrome (NOFAS), the European Alcohol Policy Alliance (Eurocare) and the ‘Mamma Beve Bimbo Beve’ team.

The preliminary meetings allowed the partners to review the images, campaign concepts and themes, and logistics of the campaign. A secondary phase of the campaign brought together advocates from other countries and continents, board members of main partners, representatives from universities and health services, FASD organizations and individuals with FASD and their families, to review and provide feedback on the features of the campaign. Skype calls and emails were used as the way to communicate and share materials with the larger group of 20 key informants.

Cuban artist, Erik Ravelo, led a team of creative designers from different continents to create a provocative and memorable image for the campaign. The ‘visual image’ was a photo of a real baby that was sleeping inside of a bottle of an alcoholic beverage. Since this was an international campaign, it was considered important to select various alcoholic beverage containers that represent different cultures and drinking habits in various parts of the world. Six different bottles were selected: rum, champagne, wine, whiskey, vodka, and beer. Each of the photos of the baby in the bottle had the same colorization and artistic theme and included the campaign tagline: ‘Too Young to Drink’. The campaign comprised different print materials (a large banner that included all series of bottles, smaller banners and posters that included one bottle, brochures that included all series of bottles and information on FASD). Posters and brochures were translated in seven languages (English, French, Spanish, Portuguese, Italian, Russian, Japanese) by native speaking members of the major partner organizations, basing on an estimation of the main languages involved. As requested by partners, all versions of posters have been translated in English and Italian, beer and rum versions in Spanish, beer and vodka in Russian, beer and wine in Portuguese, beer and champagne in French, beer and whiskey in Japanese. The campaign name ‘Too Young to Drink’ was maintained in English, in order to brand the campaign and make it recognizable in various parts of the world. To connect the audience to the visuals of the baby in the bottles, two short videos were produced, one of them explaining the development of the campaign images. A dedicated website (http://www.tooyoungtodrink.org), a Facebook site and a Twitter profile (@TYTDD2014) were created and used to collect and spread materials from the launch of the campaign and continue to provide resources and information on FASD.

All organizations which were associated or in connection with the main partners were invited to participate. Partners were also asked to spread the invitation to other organizations and their affiliates. Information on how to join the campaign was sent to the new partners and was available on the EUFASD Alliance and the ‘Too Young to Drink’ websites. Invitations to join were extended to FASD organizations and agencies, healthcare organizations, and FASD advocacy organizations. All partners agreed to launch the campaign as a part of their local events, involving colleagues, community stakeholders and the public to participate. Participants were provided with a link to a web page where they could download the free digital files of campaign materials. The partners chose the image version and file size and would use a printer of their choosing.

They were asked not to display or distribute the materials publicly prior to the official launch of the campaign: September 9, 2014, at 9:09 am, local time, understanding that the campaign was based on a collaborative ‘surprise’ launching of the materials on social media.

Social media, mainly Facebook and Twitter, were the driving force to the diffusion of the campaign. At the official launch time, partners from around the world posted their photos on Facebook, their websites and Twitter. A network of 53 partners from 27 countries displayed their campaign banners or posters in recognizable areas in cities from all continents and took photos and videos. The first photo on Facebook was posted from Japan at 9:09 am and for the next 24 h a non-stop wave of campaign photos flooded the Internet via Facebook. The campaign images were shared, ‘liked’ and reposted on various sites around the world. At 9:09 am, local time, the last photos were posted in California, USA.

The images were spread through Twitter with the specific hashtags #tooyoungtodrink, #TYTDD2014, and the global hashtag #FASD (the general hashtag used by all actions on the International FASD Day). People were Tweeting images and messages from around the world throughout the entire day. At the end of the FASD Day events, there were a total of 61 organizations that participated in the campaign. The organizations included: 41 from Europe, 11 from Northern America (nine from USA, four from Canada), four from Africa, two from Asia, two from Australia and one international from Switzerland.

The diffusion of the campaign during and just after the launch was measured by using instruments of social media analytics (Facebook Insight, Symplur, Topsy). To gain general feedback from the stakeholders of the campaign, an online
survey was sent to all the partner organizations in November 2014. The survey consisted in four open-ended questions asking how the materials of the campaign were used, the estimated number and kind of people involved in the launch action, the estimated number of people who saw the campaign, the personal reaction and the reaction of the target audience to the campaign (especially to its visual imagery and headline), a general comment about the campaign and suggestions for the future. Responses were analysed using qualitative (post hoc) methods.

Results

Diffusion in social media

During the launch week (September 9–16), the Facebook Fanpage of the campaign reached 300,000 impressions, 100,000 users, 4019 interactions and 1386 ‘likes’. The main target reached was women aged 18–44 years. The most active organizations were from the USA, Brazil, UK, Canada, Japan, Nigeria, Ghana, Russia, Poland, Spain, Slovenia, Malta, Italy, the Netherlands and other countries in Europe. In Twitter, 10,000,000 impressions for the general hashtag #FASD and 1200 tweets with the hashtag #tooyoungtodrink were obtained. The main active tweeters were members of the network of partners. In the ‘Healthcare Hashtag Project’,11 the global hashtag #FASD reached the third place in the regular ranking. After the launch, actions linked to the campaign continued, 15 more partner entities joined the campaign and the materials were made available for translations in further languages. Feedback from participant organizations

Fifteen partner organizations from countries in different continents responded (USA, UK, Poland, Russia, Finland, Italy, Malta, the Netherlands, Turkey, Romania, Canada, Ghana, Japan). One was an international partner. Respondents belonged to institutions, non-governmental organizations, associations, non-profit charities and universities. Overall, respondents referred to the campaign as a success: the campaign was considered ‘useful, wonderful, important, innovative, impressive, needed, well designed and organized, taking time but relatively easy to participate’.

In general, respondents recalled positive reaction towards the ‘visual component’ of the campaign (images and tagline). The images were considered ‘well done, very graphic, eye catching, well receiving, able to get attention, quite innovative, simple, powerful’. The message was referred to be clear and relatable. Respondents felt the image ‘strong, provoking, moving, poignant, exciting, dramatically beautiful, courageous, impressive’, but in a ‘positive way’, as it helps to ‘evoke the seriousness of the topic’.

Partners estimated an active involvement in the action ranging from a few people to about 200. Participants included board and staff members from partner organizations, health professionals including preventions specialists, physicians, paediatricians, nurses, obstetricians, psychologists, social workers, and addiction specialists. There were representatives from schools including both teachers and students, clergy, the media, and individuals with FASD and their families. The majority of the groups used banners. The materials were displayed in two different kinds of settings: community settings (events targeted to the local and general community) and scientific/professionals settings (conferences, meetings, seminars). Materials were also used within the local initiatives for the International Day on FASD (September 9). Many respondents displayed the materials in busy and important places (squares, stations, markets, museums) and/or buildings of their cities; other displayed or distributed materials in public and community locations (schools, hospitals, pharmacies, shops, cinemas, parishes, parks) and during events targeted to citizens (like a coffee event or sport games), alone or together with additional information about the campaign and basic information on FASD. Some groups distributed campaign materials to their local healthcare providers.

The majority of partners used the Internet and social media (Facebook, Twitter) to disseminate their photos and videos. They referred that some of the events received media attention and were featured on TV, radio, and magazines. The estimated number of people that viewed the campaign in each different local area varied widely, from a small group to many thousands (more than 30,000 in Japan and 200,000 in the area of Szczecin, Poland).

Most respondents stated that, in general, the audience had good, positive reactions to the visual images. Some groups reported that people in their communities were surprised and shocked to learn about the problem. One woman reported that the images were, ‘leading people to stop and think about the importance of the issue’. Other respondents said that the images have been a way of information sharing, an opportunity to ‘start conversations about alcohol and pregnancy and open up discussion’.

There were some healthcare providers that expressed concern about the images and tagline. Some worried that the visual image might remind some people of abortion and could cause women that had had an abortion to experience grief. Others were concerned about the tagline and worried that ‘To Young to Drink’ might be confused with legal drinking age issues and movements.

One of the greatest strengths and unique features of the campaign was that it was an international, world-wide effort that involved volunteers and the community at a global level to prevent FASD. The campaign also provided groups with an activity that helped to start conversations about drinking alcohol during pregnancy. Two main weaknesses of the campaign were observed. There was difficulty with the translation of the materials and the model of posting the images as a last minute ‘surprise’ made it difficult to get the media involved. Other comments that participants provided include that they found the ‘Guerrilla action’ difficult in some cultures, that they needed to be directly connected with public health organizations, that the ‘bottle visual’ may not have resonated with the young audience and the need for more facts and education about alcohol use during pregnancy and FASD.
The major partners and the participating organizations reported that they are willing and interested in continuing to work together to ‘sustain the awareness and interest of the issue’. They also said they value the connection to other organizations and having the opportunity to share ideas, thoughts, resources and lessons learned with each other. Suggestions to improve the campaign include an earlier start time to allow for more planning, more assistance with translations and reconsidering the last minute ‘surprise’ element so that the media can be informed earlier. Some suggestions for future campaigns include creating images targeted to specific age groups, using local images or images from other successful campaigns, to make printer friendly materials, and preparing new video materials. Finally, it was considered desirable to evaluate the impact of this campaign, at their different levels (reach, exposure, resources, etc.).

Discussion

Findings from the campaign ‘Too Young to Drink’ showed that it was possible to develop and carry out an international action to raise public awareness of FASD, using social marketing strategies and social media to spread materials and information on the issue, with a low budget and in different cultures. Data from diffusion and feedback provided by partners support the opportunity of using principles and methods from social marketing and health communication campaigns to improve public health, and the feasibility of the specific utilization of the guerrilla marketing approach as way to disseminate information in international communication efforts. The main strength of the campaign was recognized to be the participation and the active collaboration of an international network of partner organizations from different counties and continents. From a public health perspective, this seems to be a promising approach to mobilizing entities involved with public health around the world in joint efforts to prevent the risks of prenatal exposure to alcohol. In addition to this, as reported by participants, the campaign has represented a way, both to start a discussion on FASD, and as a lever for local organizations to motivate and initiate a local campaigning. These results support observations that noted that sharing international experiences could improve approaches to preventing FASD.

This campaign relied on organizations and people from around the world to donate their time and limited resources. The campaign experienced great success despite the lack of finances for a comprehensive evaluation plan. However, the inclusion of social media platforms did allow for collecting and analysing limited qualitative data.

Although evaluation data are limited, information obtained by the campaign is consistent with findings from previous studies which assessed that communication campaigns can contribute in spreading information and raise awareness of the dangers of prenatal alcohol exposure; and the use of a specific dedicated visual image could help catching public attention towards the problem. However, there are still limited data available on the effectiveness of public communication efforts alone to support behaviour change and consequent reduction of FASD. For this reason, the international public attention conveyed by the campaign needs to be sustained and declined in local integrated approaches and culturally sensitive specific interventions to increase the self-efficacy of the general audience and sensitive targets towards the issue. Research studies or more extensive evaluation components are needed to evaluate specific effects of international public awareness campaigns.

Author statements

Acknowledgements

The authors would like to thank all the partner organizations, professionals and individuals participating in the campaign for their support and contribution. Thank you to Mr. Andy Kachor, NOFAS Director of Media and Communications, for his expertise and support in administering and managing all of the social media events of the TYTD campaign, and thank you to Mr. Nicola Bisinella, designer and manager of the website of the campaign.

Ethical approval

None sought.

Funding

None declared.

Competing interests

None declared.

REFERENCES


