Show diarrhoea the red card

WASH United: using fun, games and sport to create awareness and behaviour change

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Abstract

WASH United is an award winning international non-profit that pioneers the use of fun, educational games, sport star ambassadors and strictly positive messages to increase the relevance of sanitation & hygiene and to facilitate behaviour change.

The paper introduces WASH United and its the learning and behaviour change theory to create awareness and behaviour change for starting to use the toilet and hand-washing with soap. It describes how WASH United is using games and sport at the Great WASH Yatra in India and via WASH in Schools and the impact of these programmes. In the end the paper will discuss some of the challenges.

WASH United

TWASH United is an award-winning Berlin-based international social impact organization that pioneers the use of fun, sport star ambassadors, interactive educational games, and positive communication to increase the relevance of sanitation & hygiene (hand-washing and menstrual hygiene) and to facilitate behaviour change at scale.

The first WASH United campaign began in 2010 in conjunction with the FIFA World Cup in South Africa to work in Africa. Since 2011, WASH United is registered as non-profit organisation in Germany and has established offices in Delhi, and Nairobi, Kenya. Currently WASH United works via partners in Uganda, Lesotho, Ethiopia, Tanzania, and Ghana.

The main goals of the WASH United

WASH United aims to achieve WASH for all, and works around the following 4 topics:

• Raise awareness for the importance of sanitation: make toilets aspirational and create demand.

- Change attitudes for hand-washing with soap at critical times and facilitate hand-washing behaviour change.
- Break the silence around the most neglected of all WASH issues, menstrual hygiene management, and bring it right into the spotlight of public discussion.
- Promote the realisation of the human rights to water and sanitation (HRTWS) through research, advocacy and mainstreaming of RTWS into WASH activities at all levels.

What is different about WASH United?

The difference in approach is "how" WASH United is tackling these goals. WASH United's organizational DNA lays in the utilization of fun, sport star ambassadors, interactive educational games, and positive communication to make sanitation and hygiene aspirational and ultimately leading to behaviour change. This runs through the various programmes and projects.

In the WASH in Schools / Youth Football Club programme, WASH United is using interactive game and football based tools and storytelling (see chapter 3). Exciting

Key factors of WASH United campaigns:

- Behaviour change
- Positive messages
- Sport, stars as role models
- Games for change
- Demand creation

high-level campaigns using non-traditional formats and touch-points (football tournaments, travelling carnivals, etc.). In addition we work closely with the media (TV, radio, print media, and social media) to extend our reach and impact.

Since 2010, WASH United has reached almost 100,000 children, and more than 1000 teachers via WASH in Schools/ Youth Football Clubs, and 280 Mio people via campaign and media work.

Behaviour change in WASH

A very common approach in the WASH sector is the provision of hardware, be it latrines or safe household water treatment, coupled with trainings and distribution of IEC (Information Education Communication) materials that communicates health messages. Many household don't see the toilet as a priority among different other needs (schooling fees, TV, mobile phone, medicine). Frequently, these toilets are then used as cowsheds, storage or simply left unattended. In the same time soap, which is often available for personal hygiene and clothes cleaning, is not used for hand-washing at all critical times, and is unfortunately often considered rather a dull practice.

The WASH sector agrees today, that sharing and teaching simply health facts is not enough to facilitate behaviour change. So let's think different, what motivates people and what can change behaviour?

Behaviour change models

Behaviour change models are looking at Knowledge, Attitude and Practices (KAP) of the target audience, but also include relevant socio-cultural and environmental influences. There are some various theories and models available, and some have been specifically applied in the WASH sector, such as RANAS and FOAM framework (Coombes and Devine, 2010; Ram, 2010; Mosler, 2012).

In the sector, content or approaches for awareness and behaviour change is mostly based on health and / or negative messaging (fear, shame, disgust). However, a lot of recent brain research shows that humans respond much better to surprising and emotional new messages. Unfortunately the WASH sector does not apply this recent thinking enough. The following 2 chapters describe the effectiveness and power of games & sport in creating aspirations and behaviour change.

Games for change

Game based learning (GBL) is designed to bring across a certain subject through gameplay and is linked to the ability of the player to retain and apply this subject matter to the real world. An effective game is not only fun, entertaining and easy to comprehend, but also one that is able to transfer the core message. In the ideal scenario, the rules and goals of the game inspire motivation and creativity to find problem-solving solutions. Research has shown that fun-based interactive games enable people to generate their own insights that are not only more appealing, but also lead to a much deeper retention of knowledge. A crucial point in game play is the reward, as they keep the player interested to finish the specific game challenge, and create positive emotions when succeeded. This paper will show how WASH United uses this approach in the WASH in Schools curricula (chapter 3) and in the Great WASH Yatra (chapter 4), where games are used for awareness creation and behaviour change around WASH issues.

The power of sport

Sport is an universal passion, and especially the love for football in Africa and cricket in India engages the individual, the community and even the entire country. Football-based messages and games are extremely attractive and create desire to participate or simply create attention. An additional advantage by using sport is, that via sport clubs youth and adults are mobilized besides the rather traditional pathway of schools or health sector, and important WASH topics can be easily integrated into trainings. WASH United is an associate member of Street Football World, and works in Kenya and Lesotho with organizations such as Matahare Youth Sport Association (MYSA) and Kick4 Life respectively.

Secondly, sport stars have a huge role model status. People, and especially young children, identify with them and take on their messages and values to increase their own aspiration and self-efficacy. WASH United pioneered football and cricket for WASH and has recruited global football stars such as Didier Drogba (Figure 1), Sebastian Schweinsteiger, and local heroes such as McDonald Mariga (Kenya), Assamoah Gyan (Ghana), Yussuf and Irfan Pathan and Suresh Raina (India) as members of the WASH United Club.

WASH in Schools activities

WASH United believes that children are key agents of change. As children spend most of their time in school, this is the place where they should learn and be motivated to perform good WASH behaviour: washing their hands with soap at critical times, always using toilets properly and drinking safe water.

In Figure 2 the well-known 'learning pyramid' shows how the retention of knowledge applies in school to identify effective learning methodologies.

Even if the exact percentages became recently under increased criticism, the higher effectiveness of participatory over passive learning methodologies remains. As a conclusion, no matter which topic, an effective WASH training should move away from lecturing students and recalling facts and information, and use activities that stimulates pupils to learn and think more instead.



Figure 1: 'Campaign poster featuring Didier Drogba, Uganda

WASH United curricula

WASH United has developed an innovative football and game-based curriculum that engages children in an interactive and participatory way. The trainings enable children to generate their own insights about the problems surrounding poor WASH through fun and play. The trainer is not just teaching facts, but rather facilitates discussions and motivation to practice the behaviour. Through the problem-based and game-based learning approach, children retain the new learning much longer, and start to have positive associations with WASH.

The WASH United curriculum includes hugely popular games that follow a specific sequence:



Lecture

average student

Figure 2: Learning Pyramid (Source: National Training Laboratory, Bethel, Maine)

Playing the "World Toilet Cup" (motto: "every poo needs a loo") children identify the reasons why having a toilet is important along the key words of health, safety, environment and respect. When they give the correct answer they are allowed to shoot the 'poo-ball' into the loo and the best shooter wins a price. In Africa the game is played as football (Figure 3), in India we use a cricket bat.

The next games are around hand-washing with soap. In the "Blue / Germ Hand Game" children learn by passing a chalk-covered ball, representing the germs in poo, how easily germs are spread. This activity is followed by the "Hand-washing Challenge" to discover the effectiveness of soap in removing the germs and practice the right steps for hand-washing at critical times. Finally, the "TippyTap competition" engage children to build their own low-cost hand-washing station. Comic-style posters, featuring stories on why practicing good WASH habits make the children stay healthy and able to play sport, support the learning.

After the completion of the training, children receive a certificate and join the WASH United Club (Figure 4). In the Club they are part of a bigger movement that also includes their favourite football or cricket stars. As WASH United's Club member, they take '3 Finger Pledge' and commit to: 1) always use a toilet when available, 2) always



Figure 3: 'World Toilet Cup':Scoring the Poo ball into the Loo in Busia Muslim PS, Uganda



Figure 4: Happy new members of the WASH United Club in Indore, India

wash hands with soap before eating and after using the toilet and 3) get three friends and family members to take the pledge.

In Uganda, the WASH United Club members in Kampala have established a mentor and peer education system, in which the members reach out to other students and their family to show and discuss with them what they have learned. They even developed their own game: opendefecation-dodge-ball, in which stones represented open defecation and stepping on it would disqualify the player in the pitch.

Results

Teachers and students uniquely reported that using the WASH United curricula is fun and entertaining, and is thus hugely popular. Members of the WASH United club became own champions among their school peers, family and community.

During the intervention in Tanzania from 2012-2013 with more than 6000 students, an average of 50 per cent increase in knowledge among the student was found, with the older students in standard 5 and 6 up to 88 per cent and younger children a bit lower at 35 per cent. In the baseline 75 per cent of the children reported they wash their hands after going to the toilet and 38% before eating and this increased to 92 and 82 per cent respectively in the end-line.

Teacher and students in Uganda have reported independently from each other very positive behaviour change impact in the school: children are using the toilets better and start to demand soap for hand-washing. The children are generally cleaner and also motivate others to keep clean. Leadership skills were promoted: some children taught other children and parents and TippyTaps were built at the children's home.

The Great WASH Yatra

With 1,000 Indian children dying from preventable diarrhoea every day, India is the undisputed world leader in child mortality far ahead of Pakistan, Bangladesh or



Figure 5. Birds view of the Great WASH Yatra

China. There are two main reasons for this: first, the country's widespread open defecation, and with 626 million Indians having no toilet at all, India is again world record holder. The second reason is poor hand-washing hygiene is not yet widely practiced in India. According to the Public Health Association, only 53 per cent of the Indian population washes hands with soap after defecation, 38 per cent wash hands with soap before eating and only 30 % wash hands with soap before preparing food.

The Great WASH YATRA, or Nirmal Bharat Yatra as it was called in India, was an unprecedented multi-channel mega-awareness campaign led by WASH United and Quicksand that took place from 4 October 2012 to 19 November 2012 in India. The Nirmal Bharat Yatra was designed with the two key goals: 1) promote life-saving hand-washing behaviour among children and adolescents; and 2) raise the importance of sanitation and menstrual hygiene management among different target groups in India. Figure 5 shows the birds view of the Great WASH Yatra.

The Yatra carnival travelled 1,950 km, stopping in rural locations near the following cities/states: Wardha/ Maharashtra, Indore/Madhya Pradesh, Kota/Rajasthan, Gwalior/Madhya Pradesh, Gorakhpur/Uttar Pradesh, and Bettiah/Bihar.

Featuring educational games, thematic laboratories, stage shows, entertainment, the 10,000 sqm carnival area created an exciting, colourful and atmosphere around WASH. The Yatra was a particularly resonant format because it built upon all the things Indians are really passionate and excited about – Bollywood song and dance, popular TV formats, but above all India's favourite sport, cricket, and used these as a vehicle to charge the "dirty issues" of sanitation and hygiene with positive emotions.

Games at the YATRA

WASH United and its partner Quicksand and designer from Studio Miscellanea conceptualized more than 30 games from which we selected the 20 best to be included



Figure 6. Collecting soap on the 'Poop minefield'

in the Yatra. All adapted to build awareness about the 2 core messages:

- 1. soap is killing germs. Hand-washing with soap
- 2. topping open defecation. Using the Toilet

Most of the games are based on traditional carnival games and other Indian games and featured a variety of playing styles: board games, outdoor games, knowledge games, single-player or multiple-player games.

One of the most popular game was 'Poop Minefield', a team game in which one player guided the second player (who was blindfolded) through an open defecation zone using only voice commands. The goal of the game was to reach the other side of the field as quickly as possible without stepping on a poop mine and to pick up as many bars of soap for bonus points on the way. "Poop minefield" is an excellent example of how the difficult issue of open defecation can be addressed in a fun and playful way and how sanitation and hygiene issues can be linked together in a single game. Figure 6 shows a boy collecting soap on the 'Poop minefield'.

Other popular games, included:

'Clean Hands Carrom' (Figure 7, left): Carrom is a very traditional Indian game that has been transformed into a tool for hand-washing education. The goal of this game was to get the hands depicted in the centre of the board clean by shooting the germs in the pockets using the soap striker. A second Carrom was developed called the "clean village carom" in which the village field on the board had to be cleaned from poop.

Bowl out diarrhea (Figure 7, right): this game really demanded good cricket bowler skills to hit (='bowl-out' the fearful diarrhea demon.

More games can be found on the website www. nirmalbharatyatra.org

Results

The Nirmal Bharat Yatra has achieved results beyond expectations:

- 160,000 people visited the Yatra on the ground (= 160% of the agreed goal);
- 230 million people through media, and hundreds of officials in the government (= 250% of the agreed goal);
- Almost 8,500 school children and 179 teachers trained through interventions with 152 schools.

Educational carnival games were one of the main attractions at the Yatra with long lines throughout the day. Participants included both children and adults, though mostly children played the games.

In terms of behaviour change, our research partners from EAWAG created a framework for monitoring and evaluating all implemented measures and their effectiveness in terms of outcomes, particularly on behaviour change on hand-washing with soap, based on the RANAS model. EAWAG has conducted 1544 pre-and post-interviews with visitors of the Yatra in 5 stops (except Wardha), and used 693 matching responses as survey size.

The results showed that several behavioural determinants changed immediately after the Yatra visit: perceived severity of diarrhoea, and on how to prevent the disease. During the post-interview, respondents gave significantly more correct answers as to what the causes of diarrhoea are and how the disease can be prevented. They reported liking hand-washing better and feeling dirtier if they did not wash hands with soap after using the toilet. Respondents also reported it to be less difficult to find the time to wash hands with soap after using the toilet and gave more useful alternatives as to what to do when there is no soap for hand-washing (Seimetz and Mosler, 2013).



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Figure 7. Carrom game (left) and long queues at the "bowl out diarrhea demon" game

Challenges

For school children to perform the targeted behaviour the educational intervention in schools and youth football clubs faces the following 3 main challenges:

Lack of infrastructure and budgets for soap in schools

Often schools don't have enough separate toilet facilities and budgets for soap and maintenance are really small compared to the enrolled school children. However, WASH United only focuses on awareness and behaviour change and does not build infrastructure. To overcome this challenge we are doing the following:

- Integration of small doable (low costs) technology option for hand-washing, Such as the TippyTap.
- Facilitate discussion and motivation among teachers, school associations and government to solve the problems.
- Link to "hardware" services: Partnering with hardware programmes and projects, which are looking for cool and attractive tools for the "software".

Motivation of teachers to participate and guide

Teachers have been found to be most important facilitators of change if they are motivated and encourage and guide the children to practice good WASH behaviour. Some teachers really play this role and change is happening at the school. Unfortunately some teaches have conflicting interests and lot of other work, and are less engaged. We have started to build up a mentor system, and included incentives such as certificates and skills-training.

Sustaining change

Beyond the initial activities it is important to use and sustain the momentum for WASH that has been created, especially in schools where new students enrol every year. Therefore, WASH United uses incentives such as annual Football Tournaments, WASH competitions and follow-up to keep schools engaged and motivated to sustain and even further improve WASH.

Conclusion

Using games and sport, WASH United has developed a unique approach to awareness creation and behaviour change in WASH, such as mass campaigns like the Great WASH Yatra and the WASH in Schools curricula. Both have been proven to create impact in terms of knowledge, awareness and behaviour change.

In the future, WASH United is looking for partners interested to use WASH United material and tools, and especially to support "hardware" programmes with cool and fun "software" tools.

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