Positive deviance: An asset-based approach to improve malaria outcomes

Introduction

This Learning Brief describes a pilot project in north-west Cambodia that used positive deviance as a method of behaviour change communication for malaria control. Cambodia has witnessed a steady reduction in the total number of malaria cases and deaths. Between 2000 and 2013, malaria cases went down by more than 81 percent and there was a dramatic decrease in the numbers of deaths from malaria from 608 in 2000 to 12 in 2013.

However, despite the decrease in malaria in Cambodia as a whole, there is growing evidence for the emergence of artemisinin resistance along the Cambodia-Thailand border area. Recent evidence has suggested that artemisinin-resistant *Plasmodium falciparum* parasites are present in that area. The spread of artemisinin resistance, if confirmed, would be a major setback to global efforts to control malaria.

Key points

» Positive deviance helps identify existing behaviours within a community that can be amplified to benefit others.

» Positive deviance engages communities throughout the project which results in strong ownership and long-term sustainability of the project.

» The positive deviance approach works to mobilise the community at large for malaria elimination.

» The positive deviance approach could also be applied in other geographic areas, at other levels of the health service, and in different types of health facilities.
This project – which took place between March 2010 and February 2012 – focused on mobile and migrant workers and resident communities in three villages in Sampov Luon, north-west Cambodia, near the border with Thailand, with a total population of around 6,000. This is an area where there are many mobile and migrant agricultural workers, who come into the area for weeks or months before returning to their home villages. Positive deviance was considered the appropriate approach to be piloted to better understand and reach out to these populations.

Positive deviance is a behaviour and social change approach that helps identify existing model behaviours within a community that can be shared and amplified by the rest of the community. It rests on the observation that in every community, there are certain individuals whose uncommon behaviours enable them to find better solutions to problems than their neighbours who have access to the same resources.

Although it has been used elsewhere for other health conditions, this was the first time positive deviance had been used for malaria prevention and control.

**The project**

The project involved selecting role models from both the resident community and mobile and migrant workers, who practised uncommon but positive behaviour with regards to malaria prevention and control. These role models then worked within the community to show other individuals and families how they could act in similar ways, in order to improve malaria prevention and enhance malaria treatment.

**Phase 1 (duration: one week)**

After a baseline survey, the first phase of the project involved engaging the community to assess their usual behaviours around malaria control. This involved large-scale meetings with key community leaders. Then, to introduce the positive deviance concept, there were community orientation meetings with the key stakeholders, village leaders, volunteers, teachers, and the mobile and migrant populations.

**Positive deviance role models**

Positive deviance (role model) individuals and families were those who despite sharing the similar risks, occupations and socio-economic resources, already demonstrated good preventive and treatment-seeking behaviours such as the correct use of mosquito nets and getting prompt diagnosis and treatment if malaria was suspected. To locate these role models, the team conducted interviews with mobile and migrant workers, landlords and community members.

It was difficult to find individuals who modelled all the positive deviance malaria prevention and health-seeking practices. As a result, five different people were chosen to model different behaviours, such as covering their arms and legs after dark, or getting a blood test when they suspected malaria. Three of these role models (the other two were too busy to join but their behaviours were also shared during the project), along-with eight volunteers were selected and trained to carry out positive deviance work during the six-month phase 2 of the project.
The positive deviance team conducted the situation analysis and identified volunteers who would participate or help in the project.

During the situation analysis, in-depth interviews and focus-group discussions were conducted separately for men and women, as they were involved in different work and so had different risks. These interviews and discussions were analysed to demonstrate patterns of migration, knowledge of malaria symptoms, beliefs about malaria, and health-seeking behaviours.

All groups showed a lack of understanding about malaria transmission, although most used insecticide-treated nets, or long lasting insecticidal nets (LLINs) that had been provided by the national malaria campaign.

In the positive deviance inquiry, in-depth interview with potential positive deviant individuals were conducted to identify positive deviant (role model) individuals and families and their uncommon behaviours and strategies.

The positive deviance team conducted the situation analysis and identified volunteers who would participate or help in the project. This included finding positive deviance (role model) individuals and families.

**Phase 2 (duration: six months)**

A total of 11 volunteers, including three role models of various backgrounds, were trained, and subsequently carried out a range of activities at the monthly interactive positive deviance sessions. These activities included role plays, storytelling and interactive discussions.

These activities aimed to share identified positive deviance practices with other community members. Community participation in the project increased as time went on, as individuals took a leadership role in the planning and implementation of the project. Monthly meetings and community-based poster and song competitions were popular. Attendance was maximized by ensuring the sessions were held in accessible venues and at suitable times.

At the end of Phase 2 in March 2011, a large positive deviance advocacy seminar was held to symbolically hand over the project to the community.

**Results**

Quantitative and qualitative surveys took place in Feb 2012, one year after the intervention completed, to assess the community’s views of the project and whether there had been lasting behaviour change.

The surveys showed that the project had been broadly successful, with high levels of community support and understanding. There had been an increase in the knowledge of malaria prevention methods and the knowledge of methods of transmission, especially by vulnerable groups, with malaria control improving at the household level.

“"The positive deviance project has increased knowledge and improved the behaviours of the community members and migrants regarding malaria. We want to continue this project to bring further improvements in our knowledge and behaviour." Village chief

"There is not much malaria this year which helped us save some money. We kept this aside for malaria treatment." Female migrant worker

The project had strengthened the capacity of village health volunteers, which resulted in an increased uptake of malaria services and advice. There were good prospects for this behaviour and social change being sustained over the longer-term. The positive deviance approach in both mobilising communities and promoting behaviour change was considered to have been a success.

**What worked well**

There was a high degree of awareness in the area about the project. Most community members and migrant workers participated in and enjoyed the positive deviance project activities. They particularly enjoyed the role plays and the community seminar that ended the project. The community aspect of the project worked particularly well, with a strong degree and equity of community involvement. Each village was given similar information and all sectors of the community – including female members - were equally involved. The project showed the community that they were able to find their own solutions to their problems.

As a result of the project, new leadership in the shape of volunteers emerged for malaria prevention and treatment in the area. In addition, the capacity of the 11 positive deviance volunteers was strengthened. There was increased knowledge about malaria, and community members showed increased health-seeking behaviour such as visiting the health centre for malaria diagnosis and treatment.

The project was cost-effective and sustainable, with a high degree of community ownership. Positive deviance sessions were still taking place a year after the project officially ended.

**Challenges and lessons learnt**

The project evaluation was challenging because, at the end-line survey, most of the mobile and migrant population had already left the villages. This made the baseline and end-line comparison for migrant populations difficult.

Positive deviance is a human- and time-intensive approach, and requires close and regular supportive supervision of the volunteers. The implementers require some basic facilitation and qualitative skills to conduct the positive deviance process and focus group discussions. This
approach provides on-the-job training opportunities to volunteers, which boost their confidence, increase their motivation and ensure their retention.

Positive deviance is very effective in targeting hard-to-reach populations as it is developed by close understanding of a particular context. As a result, the most appropriate communications strategies can be developed. Positive deviance behaviours and strategies are specific to local areas, using local role models, and so are easily accepted by the community. Community involvement is key to the success of positive deviance projects and communities should be involved at every stage. These projects work best in collectivist societies, where people are linked and have a strong sense of belonging. Individuals see other group members' uncommon practices and think “if they do it, then so can I”. Positive deviance activities are also more effective in communities where a specific problem is already being felt.

Another benefit is that positive deviance can be used as a method of interpersonal communication, alongside other methods of malaria control.

References


Recommendations

A range of recommendations, covering many different aspects of positive deviance and malaria, came out of this project. Some specifically apply to this particular community; others refer to work that could be replicated elsewhere.

1. The positive deviance approach could be applied in other areas such as public health facilities, private clinics and private health providers to improve the use of malaria services.
2. The approach is appropriate to engage and target the hard to reach populations, marginalised and ethnic groups therefore very suitable for the malaria elimination settings.
3. The approach can be used with village volunteers to improve their performance, motivation and retention.
4. Positive deviance role models and their behaviours can be leveraged through electronic media, such as provincial and national radio and TV.
5. The provincial and local health facility staff should be trained to replicate or scale-up the positive deviance approach at provincial or district level.
6. Community and community-based individuals such as village health volunteers and health centre staff should be given a lead role when positive deviance is implemented at community level.