



Positive Deviance: An innovative approach to improve malaria prevention and treatment practices among mobile and migrant workers in Cambodia



Abstract:# 714

Muhammad Shafique¹, Bou Kheng Thavrin², Jane Bruce¹, Celine Zegers de Beyl¹, Sylvia Meek¹, David Sintasath¹, Duong Socheat²

¹Malaria Consortium, ²National Center for Parasitology, Entomology, and Malaria Control, Ministry of Health, Cambodia,

Fig 1. Map of Containment Zones



Acknowledgements

We would like to acknowledge the partnership with Centre for Parasitology, Entomology and Malaria Control (CNM), World Health Organization and funding support from the Bill and Melinda Gates Foundation



Abstract

Introduction: Reaching mobile and migrant populations is one of the key strategies in the containment and elimination of artemisinin resistance in the Greater Mekong Subregion (GMS). Positive Deviance (PD) is an asset-based behaviour change approach with the underlying notion that every community has certain individuals (positive deviants or role models) whose malaria prevention and treatment practices result in better health outcomes than their neighbours. Malaria Consortium (MC) supported Cambodia's National Malaria Programme to pilot PD among residents and migrants in three villages in Sampov Loun district. The PD pilot aims to identify and promote good health seeking practices in both communities.

Main objectives of the PD pilot were to:

- Describe the practical application of a PD informed project on malaria
- Develop an effective communication strategy based on the uncommon special behaviours and innovative and accessible strategies of role models
- Sensitize and orient National Malaria Programmes, Cambodia and Thailand, and partners on the potential of this innovative approach

Methods: PD approach was piloted, first time, on malaria among resident community and among mobile and migrant population in three villages (total population 6000) in Sampov Loun district, Cambodia. The baseline survey (n=309, 93 household and 216 migrants) was conducted in Aug 2010. The one-week PD process included the following 6 steps:

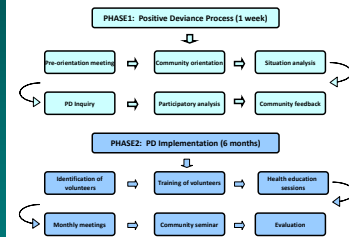
- **Pre-orientation meeting:** Pre-orientation meeting was conducted to sensitize the leaders including provincial malaria supervisors, operation district staff, health centre staff and village authorities on the PD approach
- **Community orientation meeting:** A large community orientation meeting was conducted with the key stakeholders, village leaders, volunteers, teachers and mobile and migrant population from the pilot communities. Main purpose of the meeting was to introduce the PD concept and create community ownership in the PD process
- **Situation analysis:** The situation analysis was conducted to establish the normative behaviours around malaria prevention and control. A total of 6 focus group discussions and 13 in-depth interviews were carried out with community members, farmers/landlords and mobile and migrant workers during the situation analysis
- **PD inquiry:** The PD inquiry helped identify the community members and migrants who despite sharing the same resources and living in the same community have shown healthy behaviours and outcomes. The team conducted in-depth interviews with mobile and migrant workers, landlords and community members to identify the role models.
- **Participatory analysis:** All the role model behaviours identified during the situation analysis were written on the flip charts and displayed on the walls in a local school building. The key community stakeholders were invited to go through the findings and encircle the uncommon practices (PD behaviors). The purpose of the joint analysis was to validate and triangulate the PD findings with the community members
- **PD feedback session:** After the PD behaviors have been identified, the PD team organized a community feedback and action plan meeting. The purpose of this meeting was to share the PD findings, mobilize and motivate the community members, migrants and landlords to devise strategies to enable other community members to adopt these positive behaviors. Around 50 participants from 3 villages attended the meeting.

Results: The baseline survey suggested that knowledge about malaria and prevention were high in both communities but health-seeking behaviour for fever could be improved (residents 44.4%, migrant 33.3%). During the PD process, 13 in-depth interviews and 6 focus group discussions were conducted to identify the role models. The followings are few examples of PD role model behaviours identified from the communities:

- A migrant worker's wife always pack an insecticide-treated hammock net in her husband's luggage, whenever he goes to the farm and reminds him, "Darling! Do not forget to use bed-net before you sleep to avoid malaria".
- A migrant worker always sleeps under the insecticide-treated hammock net in the farm. He has been visiting farm for many years but never got sick with malaria
- A farm owner keeps 10 extra insecticide-treated bed-nets in his farm house. He lends these nets to the migrant workers who come to work on his farm. He ensures that his workers sleep under the insecticide-treated bed nets to avoid malaria. He thinks that if the workers are healthy, they will work well and earn well which is good for his work and for their wellbeing.

Next steps: All PD practices were shared with other community members for behaviour changes through a 6 month PD-informed intervention which included training of volunteers, interactive health education sessions, role plays, art competitions and an advocacy seminar. A one-year follow up survey will be conducted to better evaluate this intervention, but preliminary results suggest that PD can serve as 1) a malaria intervention targeting migrants; 2) an alternative or supplementary method to deliver existing behaviour change communication/information, education and communication (BCC/IEC) interventions; and 3) an innovative model to promote community-based, bottom-up approaches.

Fig 2. PD Implementation Flow Chart



A PD role model

A young female migrant worker Ms. Hun Srey Pao has been visiting this area for the past five years, she had never fallen ill from malaria, unlike many of her fellow farm workers. She always sleeps under an insecticide-treated net (ITN). She believes that only mosquito bite causes malaria. She strongly believes that the correct use of ITN will protect her from malaria. She tries to sleep early to avoid mosquito bites in the evenings. When she watches TV after dusk, she wears long sleeved clothes and wraps a 'krama' or traditional scarf around her feet to avoid mosquito bites. Whenever she gets fever and suspect malaria, she goes to the village malaria worker immediately for a blood test. During the community feedback session she said to a large audience "If you all follow these practices you will never get malaria".



Community seminar to reinforce messages



Community orientation session



PD conceptual game with migrant workers



Focus group discussion with migrant workers



In-depth interview with a role model



PD interactive feedback session



Monthly meeting of volunteers