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Positive deviance: An innovative approach to improve malaria outcomes

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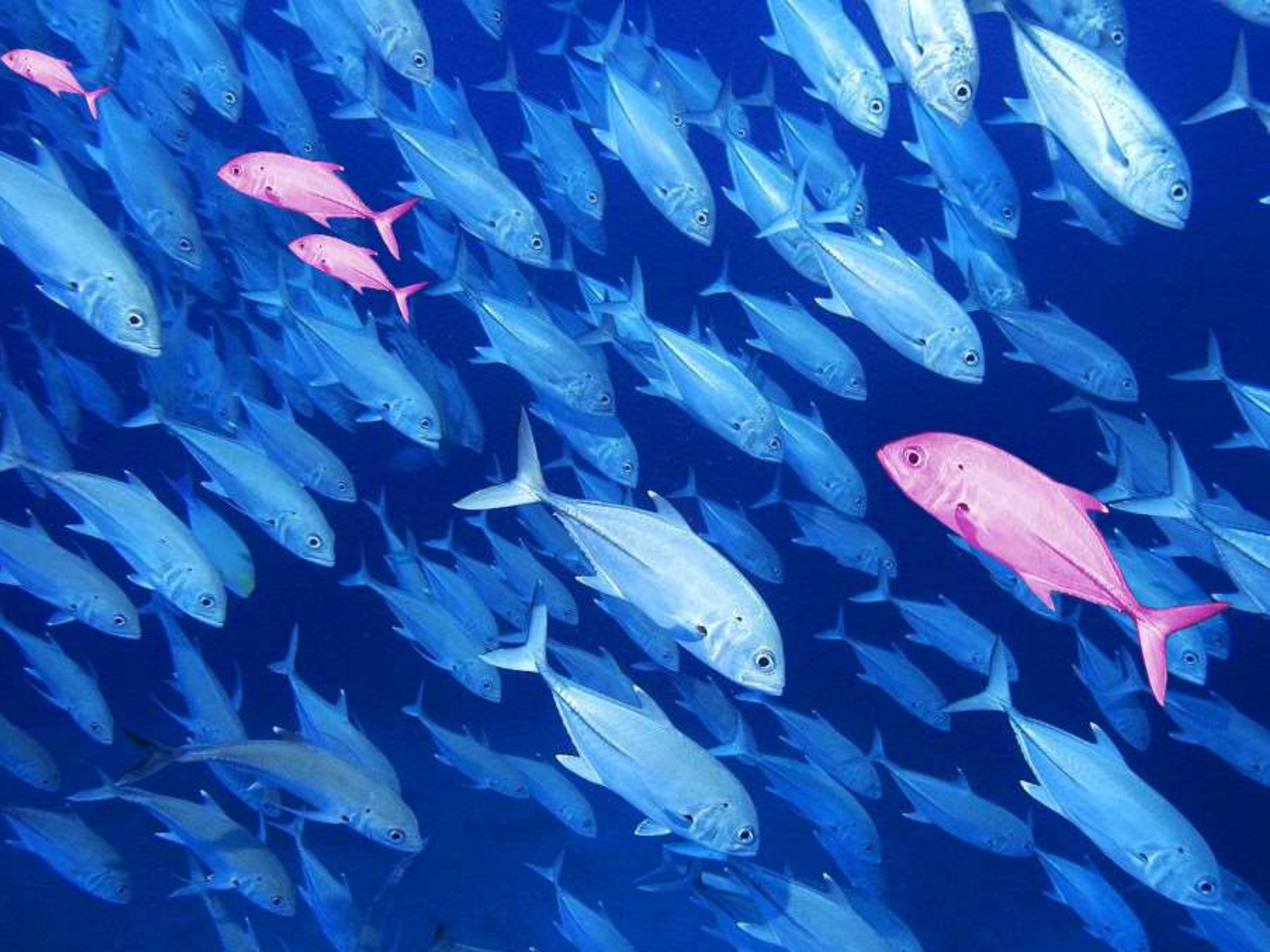
Manila, Philippines



Positive deviance concept

- In every community there are certain individuals whose **uncommon/positive behaviours** enable them to find **better solutions to problems** than their neighbours who have access to the same resources

PD History

1980s	Marian Zeitlin, Tufts Visiting Professor, applies asset-based approach in nutrition research
Early 1990s	Monique & Jerry Sternin begin using PD in Vietnam
Mid 1990s	PD for nutrition is scaled up in Vietnam, spreads to other countries
Late 1990s-present	PD is applied to many intractable problems including advocacy against FGM, MRSA transmission, education, HIV/AIDS, and human trafficking
2011-present	Malaria Consortium is applying Positive Deviance first time on malaria and dengue in the GMS region

PD programme experience

Programmatic context	Countries
Childhood development & Malnutrition (PD/Hearth)	More than 40 countries throughout the world
HIV/AIDS risk reduction	Myanmar, Indonesia, Viet Nam
Antenatal care, Maternal & Newborn Care, Breastfeeding	Egypt, Pakistan Viet Nam
Female Genital Cutting	Egypt
Girl Trafficking	Indonesia, Nepal
Education Issues	Argentina, US (NSDC)
Quality of Health Care	US (Waterbury Hospital, Connecticut)

Projects

Education Healthcare Nutrition Public Health Vulnerable Groups Other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CRS
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World Vision


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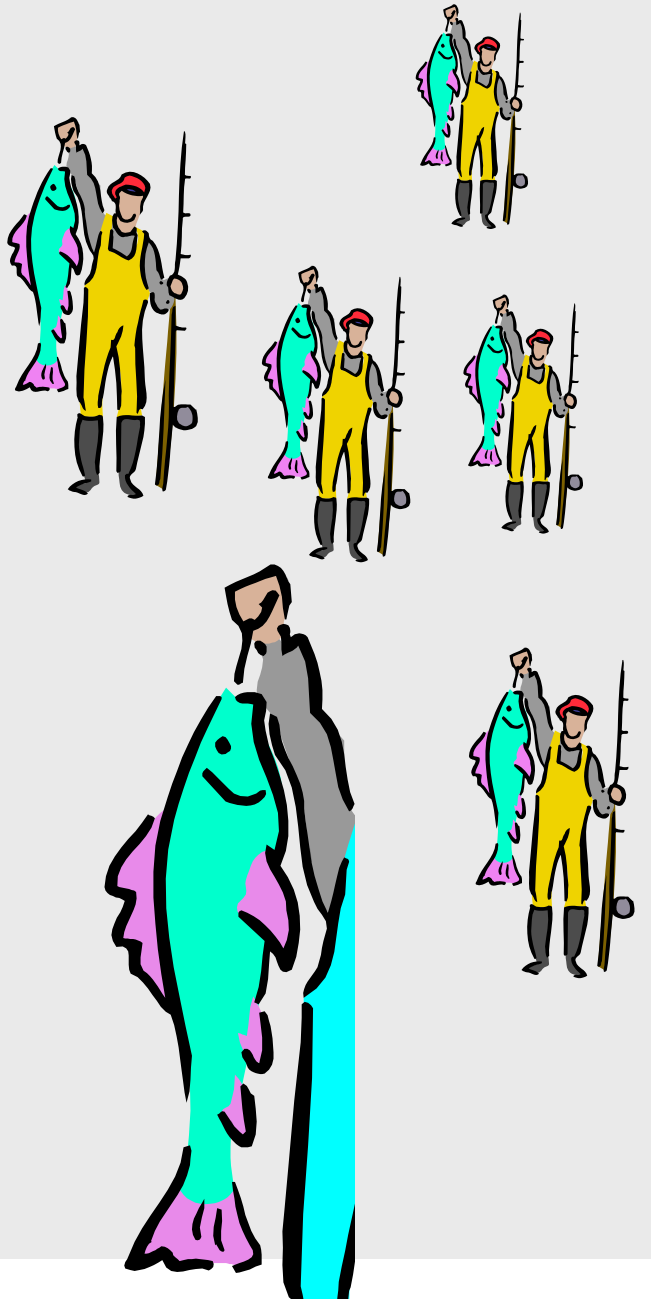
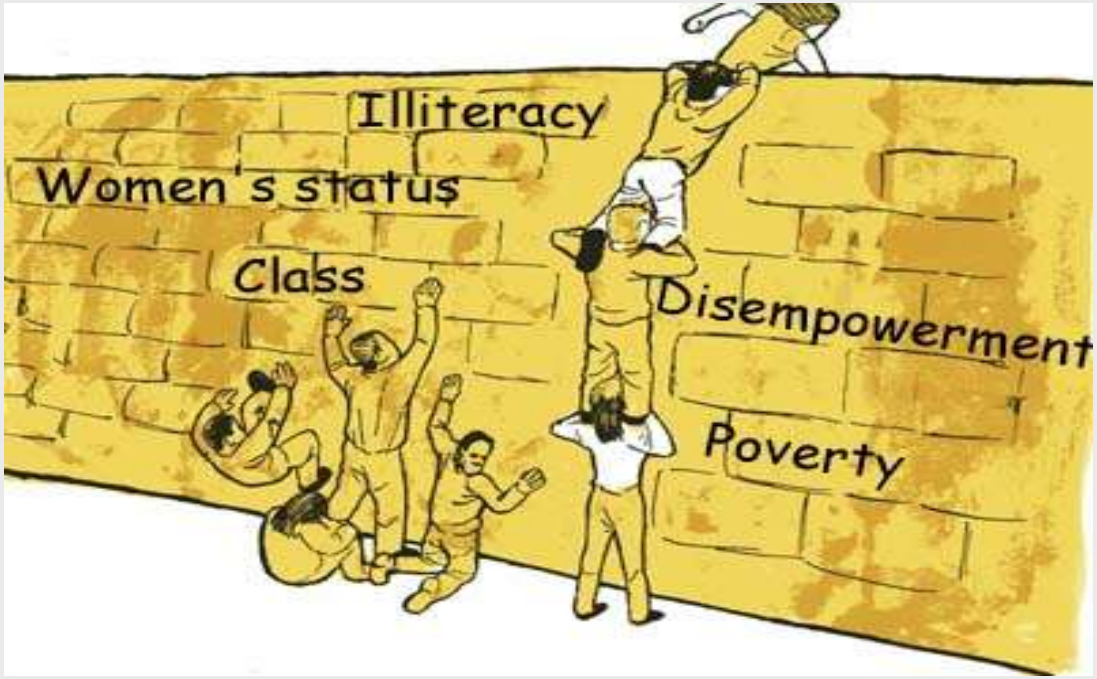
Focus on PD Behaviours

- We can't (yet) clone people
- But we can adopt their successful behaviors/strategies



PD Focus on Practice rather than Knowledge

PD Enables us to Act TODAY



The presence of Positive Deviants demonstrates that it is possible to find successful solutions TODAY before all the underlying causes are addressed!

Traditional vs. Positive Deviance Approach

Traditional Approach

- Externally Fueled (by "experts" or internal authority)
- Top-down, Outside-in
- Deficit Based "What's wrong here?"
- Begins with analysis of underlying causes of PROBLEM

Positive Deviance

- Internally Fueled (by "people like us", same culture and resources)
- Down-up, Inside-out
- Asset Based "What's right here?"
- Begins with analysis of demonstrably successful SOLUTIONS

Positive Deviance on Malaria

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Why PD in Greater Mekong Sub-region

- **Focus is from control to elimination**
- As the malaria programme strategy shifts from control to elimination, it requires more effective community engagement approaches to maintain the participation and enthusiasm of communities in the wake of disappearing disease
- Innovative, local and focused approaches are required to engage and target the high risk mobile & migrant populations, ethnic groups and hotspots to control/eliminate malaria
- **Interpersonal communication (IPC)**
- Surveys suggest IPC as the most preferred communication method.
- PD is the best IPC method as it engages community and expedite the process of behaviour change

Objectives

1	2	3	4
To describe the practical application of a positive deviance (PD) informed pilot project on high risk community members, rubber tappers and fishermen	To orient the National Malaria Control Programme, Myanmar and key partners on the PD approach	To conduct evaluation of positive deviance approach using both quantitative and qualitative methods	To document the process and lessons learned to share with national malaria programmes and key stakeholders/ partners

Positive deviance pilot villages

PD piloted in six villages of Kyun Su Island, Myanmar

- Population: 7,000
- April 2013 to March 2014
- Selection criteria
  - High risk MARC area
  - Presence of high risk population rubber tappers/fisher men
  - Presence of village volunteers

PD process

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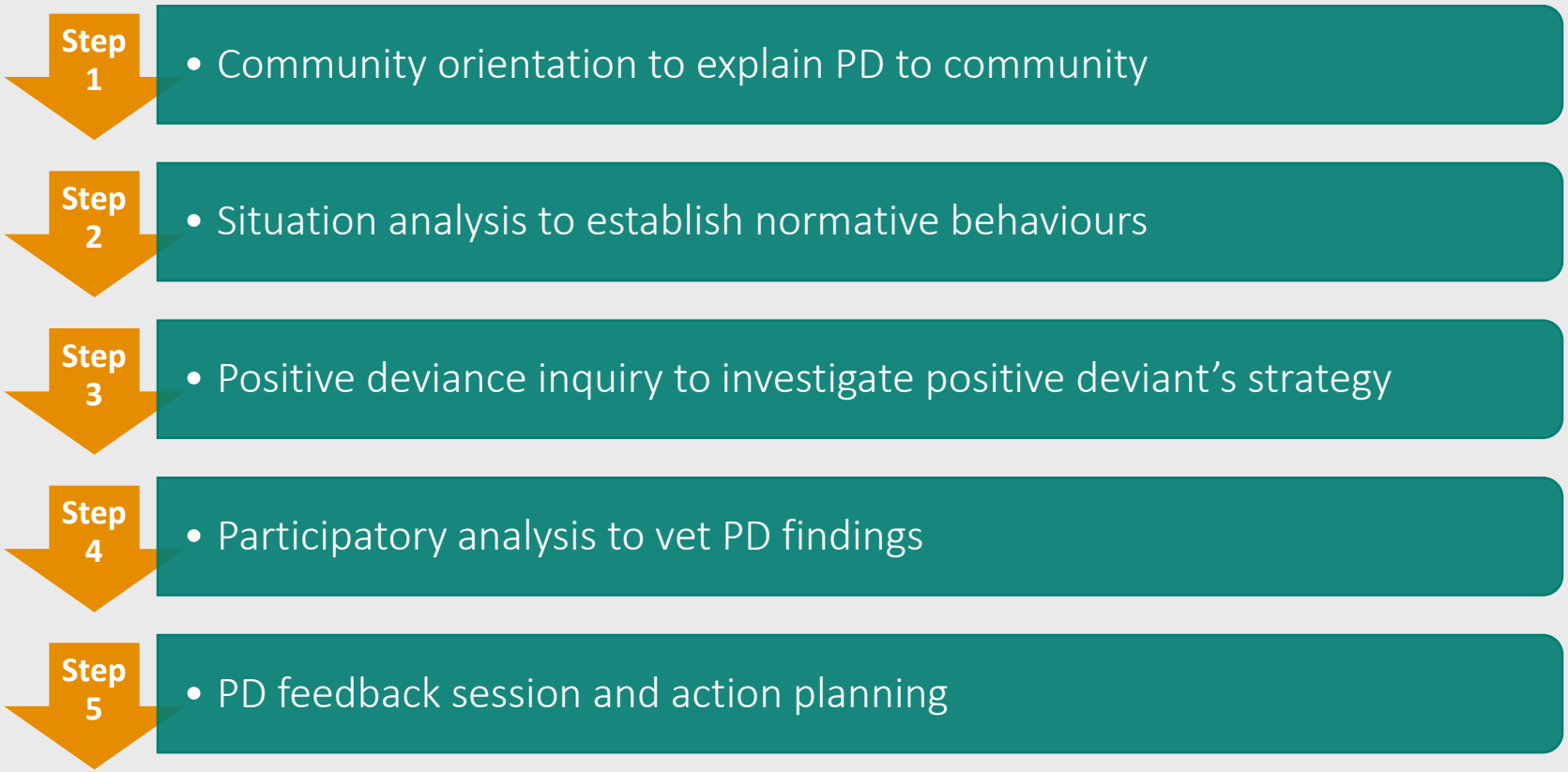
Positive deviance process



Positive deviance process conti…

1. **Community orientation**

- Invite community members
- Explain PD concept through games and stories
- Promise to assemble again in a week with solution

2. **Situation analysis**

- Conduct focus group discussions
- Establish normative behaviours of community around malaria
- Identify potential positive deviants through FGDs

Positive deviance process

3. PD inquiry:

- In-depth interviews with potential PD role models (male/female)
- Identify successful PD behaviours and strategies

4. Participatory analysis

- Write PD behaviours on flip charts
- Invite key community stakeholders to vet or validate PD behaviours

5. Feedback session:

- Conduct at the end of PD process to share the identified PD behaviours
- Share PD findings through role plays
- Identify volunteers

Example of PD role model behaviour

A female rubber tapper who works in a rubber farm for 15 years but has never had malaria:

- She **always wears a long-sleeved shirt, long trousers and rubber boots** when she works in the rubber farm
- She **covers her head and face with a cloth** during rubber tapping to avoid mosquito bites
- When she is at home, she **always sleeps under the LLIN**
- **Burns coil** when cooking/TV
- Whenever gets sick, she **always contacts the volunteer for blood test**

Positive deviance implementation

Positive deviance implementation

➢ Training of volunteers

- PD volunteers are trained about malaria prevention and control, communication and facilitation skills, etc.

➢ PD sessions

- PD volunteers conduct regular interactive PD sessions in their communities to share PD behaviours
- Role plays and story telling methods are used in the PD sessions

PD session

PD session

Positive deviance implementation conti…

- **Participatory monitoring**
- PD volunteers create “village malaria maps” to show coverage of PD sessions and HH with suspected cases
- **Monthly volunteers meetings**
- Progress review, feedback
- On job training of volunteers
- **PD seminar**
- A large community event to handover project to community
- Reinforce messages and acknowledge volunteers

Evaluation

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Evaluation methodology

Data collected at baseline (March 2013) and endline (March 2014)

Quantitative data

- Household survey of 462 (baseline) and 496 (endline) households

Qualitative data

- 12 focus group discussions and 10 in-depth interview

Results

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Key finding 1: Behaviour change communication coverage

Increases in behaviour change communication (BCC) coverage were largely attributable to the PD intervention.

BCC coverage increased from **15.9% to 63.0%**

- i.e. receiving any malaria messages/information in past six months

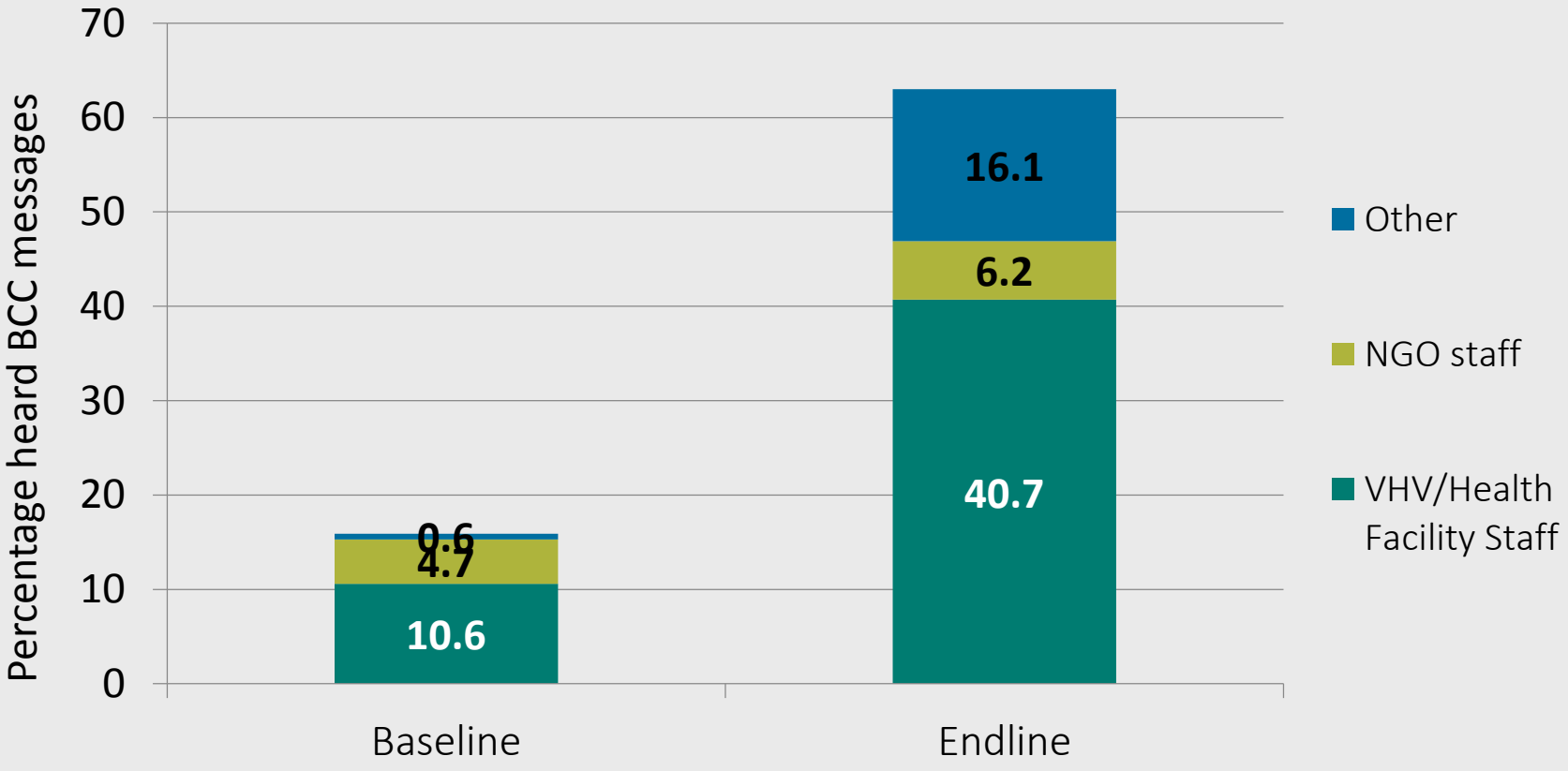
Increases in coverage were mostly due to increases in messages from health workers

- **40.7%** of respondents received information from village health volunteers (VHVs)/ health facility staff at endline, compared to **10.6%** at baseline

PD was only the intervention in villages that engaged VHVs/health staff

- **Only other NGO in the community** (Myanmar Medical Association) was also part of the intervention

Behaviour change communication coverage and its source



Key finding 2: Knowledge

Knowledge about malaria risks, symptoms, prevention methods and treatment increased.

Knowledge	Baseline	Endline
Mosquito bites cause malaria	76.3%	93.3%
Sleeping under insecticide treated net can prevent malaria	55.6%	78.6%
Fever is a symptom of malaria	55.2%	84.1%
Antimalarials must be taken for three days	40.3%	50.6%
Person may not recover if they don't complete treatment	27.6%	45.2%

Key finding 3: Attitudes

Attitudes towards village health volunteers improved.

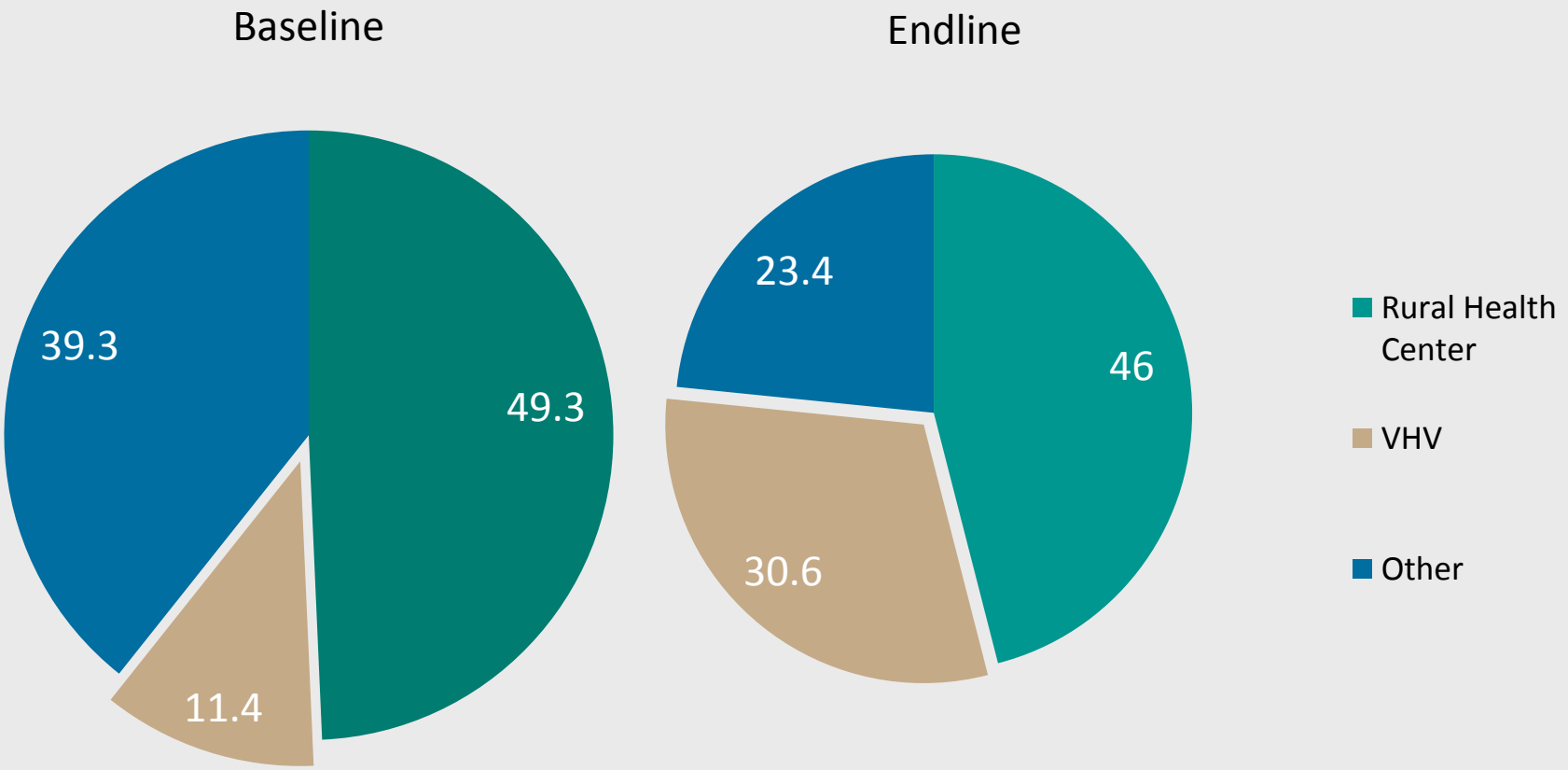
Over time, VHVs became the second most important source of malaria advice or treatment and testing

- At endline **30.6%** of households would go to VHVs for malaria advice or treatment, compared to **11.4%** at baseline

Rural health centers, however, remained the primary sources of advice, testing and treatment

- 46% (baseline) -39% (endline) would go there for malaria advice or treatment
- Reduction possibly because people more likely to go to VHV first

Preferred sources of malaria advice and treatment



Key finding 4: Practices

Prevention practices among women, fishermen and forest-goers improved.

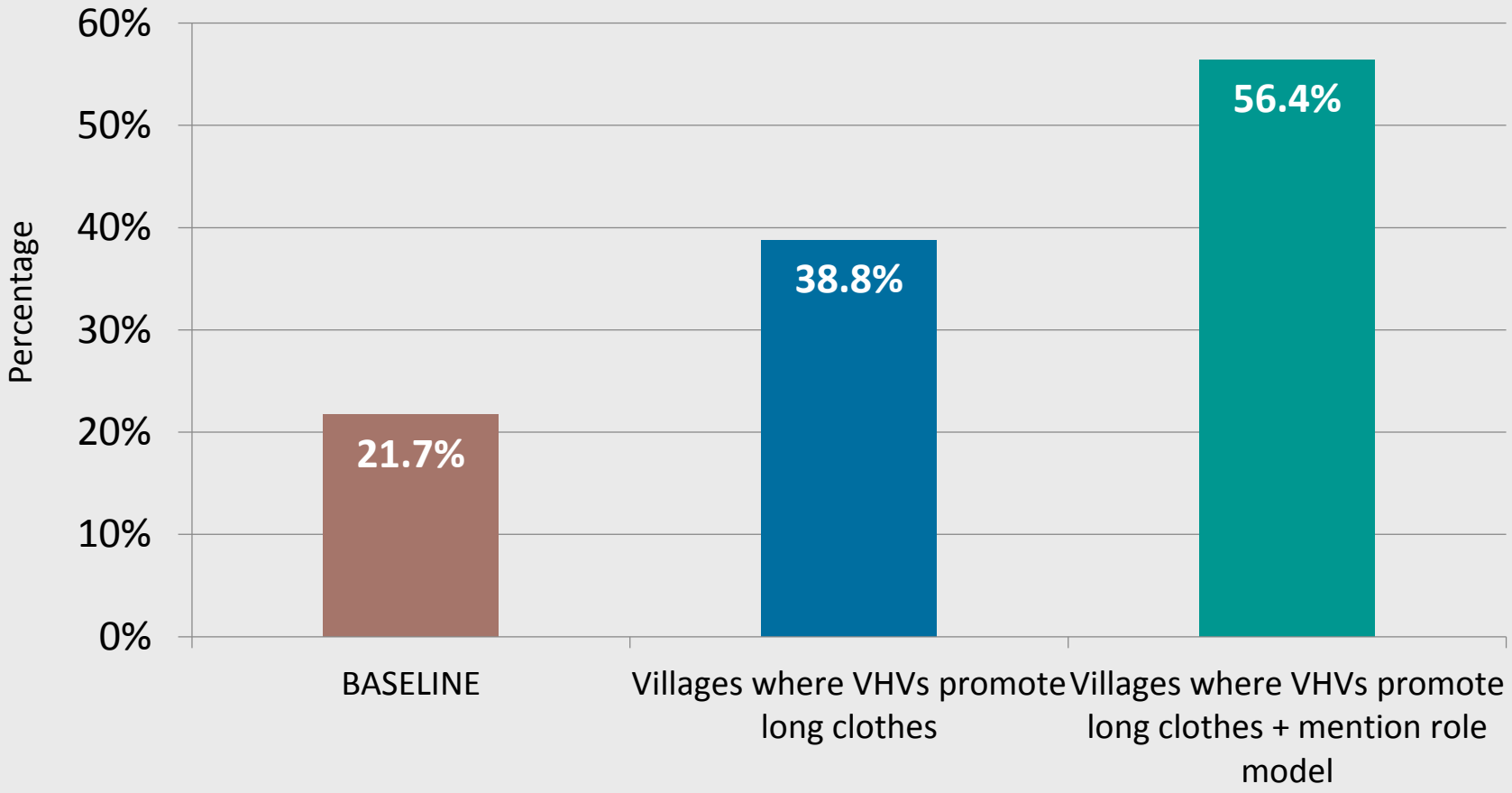
Practices	Baseline	Endline
Bed net usage among women	69.9%	78.4%
Wearing of long clothes among forest-goers	24.2%	49.3%
Wearing of long clothes among fishermen	18%	36.7%

Key finding 5: Impact of positive deviance on key behaviour

People in villages where the role model wore long clothes were more likely to also do so, compared to people in villages where the role model did not

Village	VHVs promote long clothes?	VHVs promote long clothes + mention role model?
War Chaw	✓	
Kat talu	✓	
Ka Phwar	✓	
Tee Pu	✓	✓
Kadu Kadut	✓	✓
Pyint Htet Aww	✓	✓

Proportion of forest-goers and fishermen that wear long clothing to avoid malaria



Conclusion

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Lessons learned

- Strong community mobilization tool
  - Positive deviance engages community through out the process which develops strong sense of ownership
- Effective interpersonal communication tool
  - An effective alternative to traditional BCC methods for hard-to-reach populations
- Fills in the formative research gap
  - PD process helps understand context, normative behaviours which enables us to develop tailored communication strategies
- Build capacity and leadership in volunteers
  - PD approach provides on-job training opportunities to volunteers which boost their confidence, increase motivation and ensure their retention.

Challenges

- Require some basic facilitation skills
  - PD is a human intensive (PD process) and requires some facilitation skills
- Time and human intensive (especially PD process)
  - The first, one-week, phase is intensive
- Require regular supportive supervision
  - PD requires regular monitoring and supervision (at least on monthly basis

Next steps

- Randomized controlled trial
  - A randomized controlled trialed is being conducted in Hinthada Township, Myanmar with an entomological component
- Scaling up and cost effectiveness
  - PD will be scaled up in Myanmar
  - Costing and cost effectiveness of PD activities will be evaluated

Thank you!

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