



Monitoring for ensured communicable disease control on evacuation site

Japan Team PI: Sakiko Kanbara^a

Nepal Team PI: Tara Pockarel^b

C. Sharma^c, A. Pandey^b, A. Joshi^d, S. Miyagawa^e, R. Ngatu^a, HJ. Lee^a, and S. Nojima^a

a University of Kochi, Japan; b Tribhuvan University, Nepal; ^c Nepal Nursing Council, Nepal; ^d Okayama Prefectural University; ^e Keio University, Japan, Japan



Acknowledgement

Sarada Barakoti
Sundari Tamang
Urmila Chitrakar
Sarita Dhungana
Pramila Jirel
Shreemaya Jirel
Devaki Khatiwada
Babita Jirel
Lumbini Shakya
Sunita Panthi
Roshani Shrestha
Chandramaya Dangal
Madhu Gomja

Indramaya Gurung
Maya Shrestha
Sharan Khanal
Indramaya Shrestha
Ram kumari Luitel
Samjhana Kunwar

Thakchi Sherpa
Sumala Basnet
Sanumaya khadka
Jasmaya Jirel
Srijana Khadka
Sarita Dhakal



EpiNurse Center in Nursing Association of Nepal

EpiNurse = Epidemiology (疫学) + Nurse

Sushila Paudel
Epinurse co-ordinator and
research assistant



Please, visit “EpiNurse Center NAN by J-Rapid”

Facebook page for EpiNurse Center NAN by J-rapid.

Header: Kanbara Sakiko | ホーム 2

Navigation: Facebookページ | メッセージ | お知らせ 6 | インサイト | 投稿ツール | 設定 | ヘルプ

Profile Picture: Group photo of EpiNurse Center NAN by J-rapid members.

Cover Photo: Group photo of EpiNurse Center NAN by J-rapid members.

Page Info: EpiNurse Center NAN by J-rapid | コミュニティ | コールトゥアクションを作成 | いいね! しています | メッセージ

Stats: 723 投稿のリーチ | 184 投稿のエンゲージメント | 0 ウェブサイトクリック

Recent Posts:

- いいね! 128件 今週: +9件
高橋 佳代子さん、他友達42人
- 今週の投稿のリーチ723人
- ページフィードを表示
他のページの投稿を表示
- 友達に「いいね!」をリクエスト

Actions: ステータス | 写真・動画 | クーポン、イベントなど

Recent Activity:

- EpiNurse Center NAN by J-rapidさんがアルバム「Damgade, Dhading」に写真14件を追加しました Sushila Paudelさんと一緒に。

Chat: チャット (12)



Objective

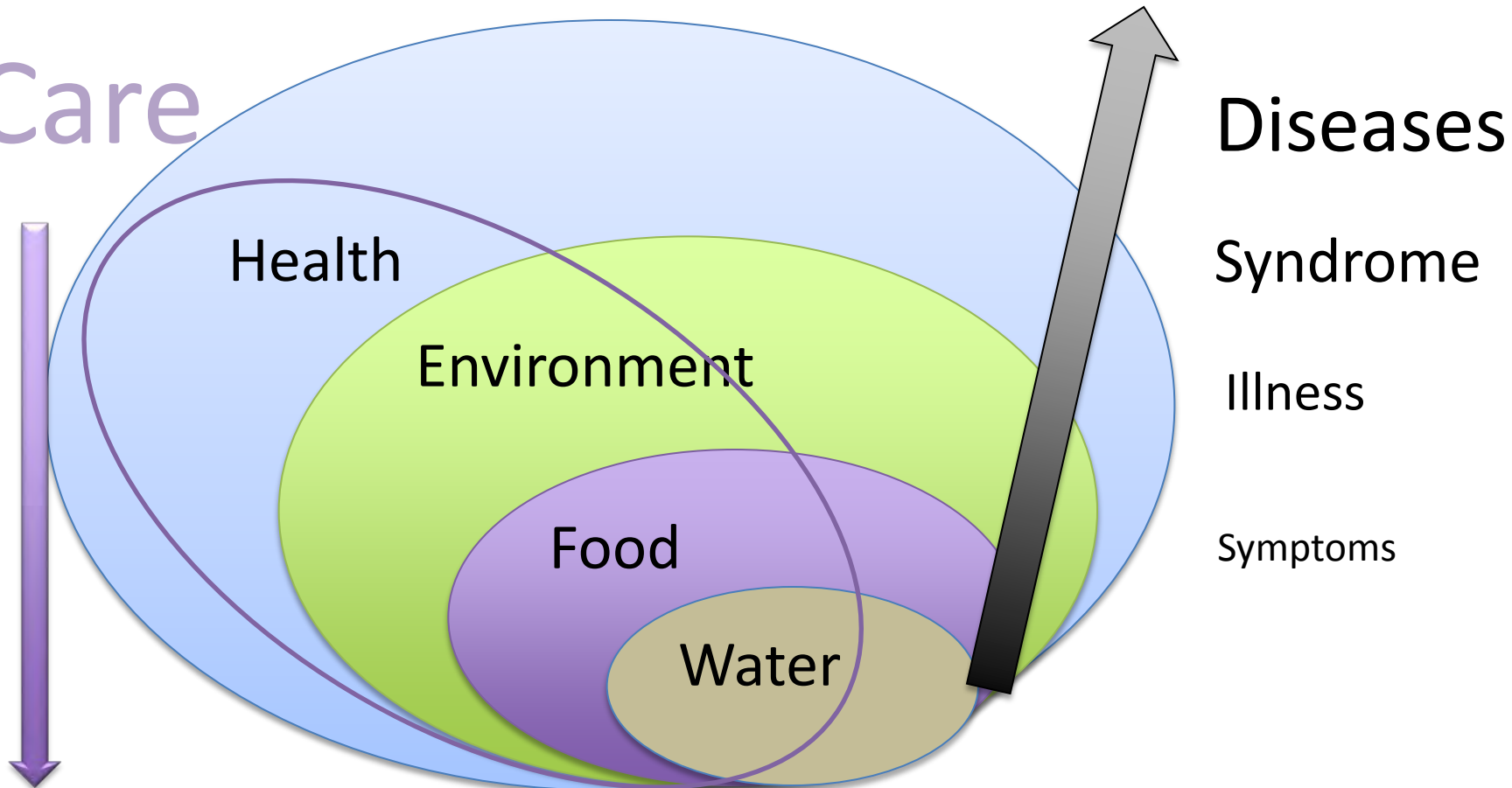
- To assess communicable diseases of the population.
- To assess out the local living environment for surveillance and interventions and priority activities
- To develop Apps to pass the information to the government, donors, and other concerned authorities
- To find out the barrier for monitoring communicable diseases.



Paradigm of Nursing

Cure

Care



HUMAN SECURITY MEASURES

now or never



- (Z) Shelter Characteristics
 - Data mining from Open data


(B)Physical Assessment

Nursing Assessment Sheet

Example

- Sleep
- Face
- Trauma
- Weight
- Body temperature
- BP

Pain

A white smartphone and a black tablet are shown at the bottom right of the slide. The smartphone screen displays a line graph with a red line and a blue line. The tablet screen displays a similar line graph with a red line and a blue line.

J-rapid Monitoring too Kit

Shelter

WHO

(C) SPEED

Example

- Fever
- Cough
- Eye irritation
- Loose stools
- Fractures
- Edema

1 month after Quake
Once a month

Mobile clinic

Ministry of Health

Example

- Influenza Like Illness
- Severe Acute Respiratory Infection
- Diarrhoea
- Acute Bloody Diarrhoea
- Suspected cholera ...

**Detected only by
diagnosis in Public Hospital**

Hospital

outcome

Environment

Behavior

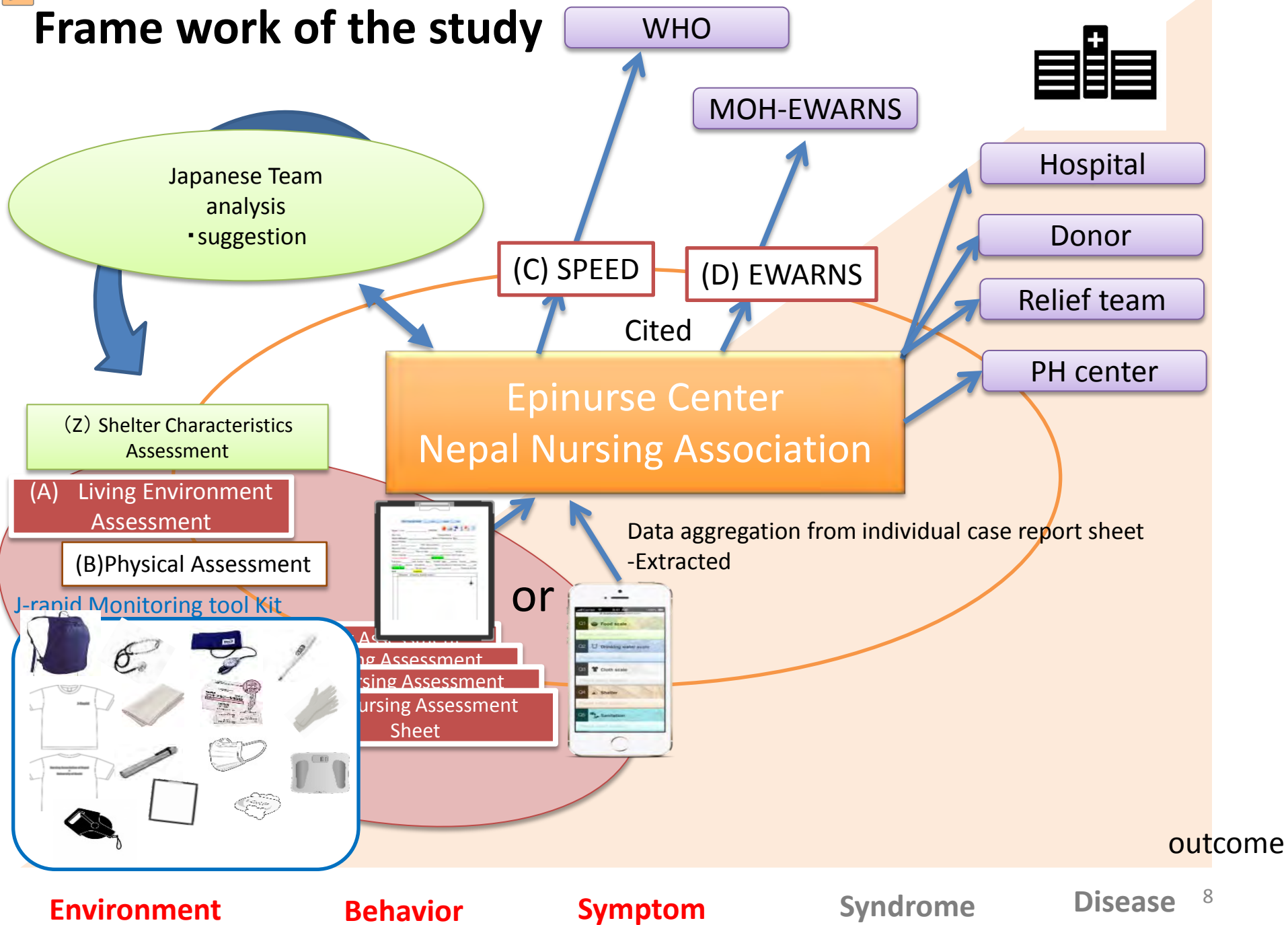
Symptom

Syndrome

Disease ⁷



Frame work of the study



Research Flow

JAPAN

Relief Site

visit Relief Site

- observation
- interview

①
August

Kick off meeting

- ✓ Preparation Monitoring tool kit
- ✓ Focus Group discussion

②
September

visit Relief Site

- observation
- interview

Relief Nurse Center
(Analyst)

Monitoring &
Promoting Health on Site

③
October
and
November

Debriefing session in Japan

④
March

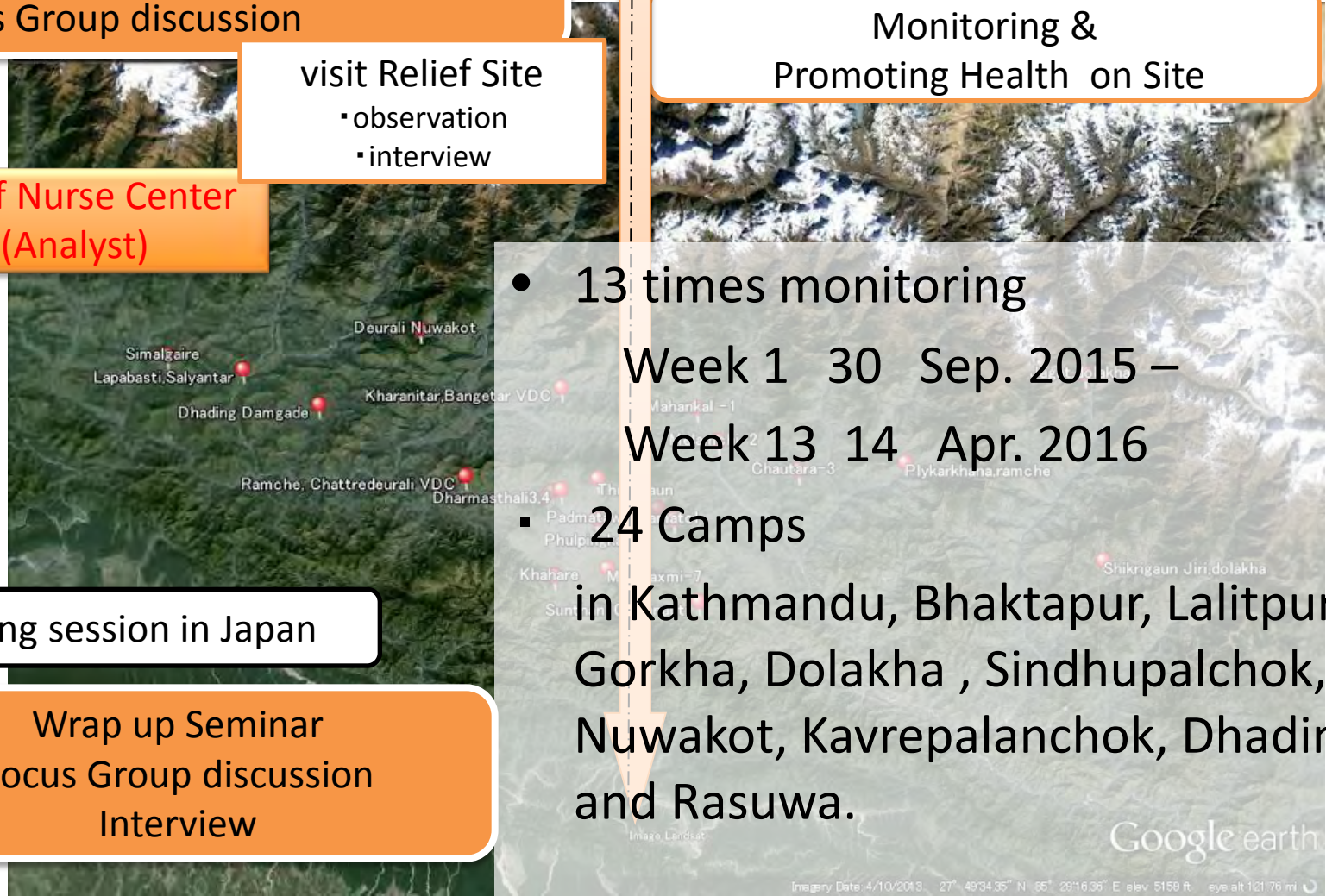
Wrap up Seminar
Focus Group discussion
Interview

- 13 times monitoring

Week 1 30 Sep. 2015 –
Week 13 14 Apr. 2016

- 24 Camps

in Kathmandu, Bhaktapur, Lalitpur,
Gorkha, Dolakha, Sindhupalchok,
Nuwakot, Kavrepalanchok, Dhading
and Rasuwa.



Google earth

Damgade

Population 515
(under 5) 96
(Male) 227
(Female) 288
Total number of families 131

Golda

Population 62
(under 5) 18

Population 250
(under 5) 8
(Male) 127
(Female) 115
Total number of families 48

Padma Tower

Population 204
(under 5) 25
(Male) 99
(Female) 204
Total number of families 35

Population 579
(under 5) 57
(Male) 283
(Female) 296
Total number of families 133

Population 342
(under 5) 42
(Male) 147
(Female) 153
Total number of families 50

Population 183
(under 5) 8

Kharanitar, Bangetar VDC

Mahankal -1

Melanchi -2

Chautara -3

Plykarkhana, ramche

Ramche, Chattrdeurali VDC

Dharmasthali 3,4

Thulo Gaun

Padmatawar Lamatol

Phulpingkatti

Khahare

Mahalaxmi -1

Sunthan 10, Panauti

Jagat, dolakha

Shikrigaun Jiri, dolakha

Lapa basti

Population 252
(under 5) 18
(Male) 120
(Female) 132
Total number of families 54

Population 320
(under 5) 11
(Male) 159
(Female) 150
Total number of families 70

Phulpingkatti

Population 47
(under 5) 2
(Male) 32
(Female) 13
Total number of families 10

Plykarkhana



Preparation 2 Days Workshop for Epinurse



EpiNurse perception for surveillance

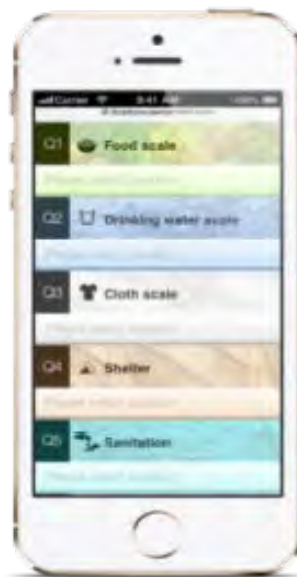
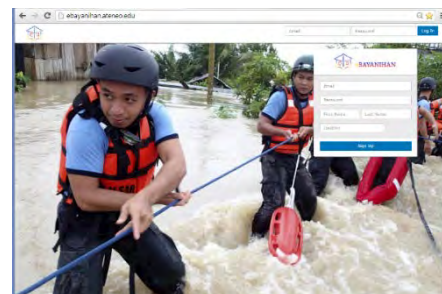
Main health issue	Starvation Sanitation, Communicable disease(diarrhea, measles, dysentery) Psychosocial problem, Family crisis, Over crowding, Safety and security
How to improve?	Mobilize community leaders, FCHV Health survey, Data analysis Health action as per priority Implementation , Health education Coordinate with DPHO, INGO, NGO, local leaders, social workers and so on
Where to report ?	Health center, Local leaders, DPHO, NAN Epidemiology department/MOH
What kind of information feedback needed?	Human resources, Money Communication materials, Monthly supervision Medicines, Referral format
How to report ?	SMS, email, phone, Facebook Messenger



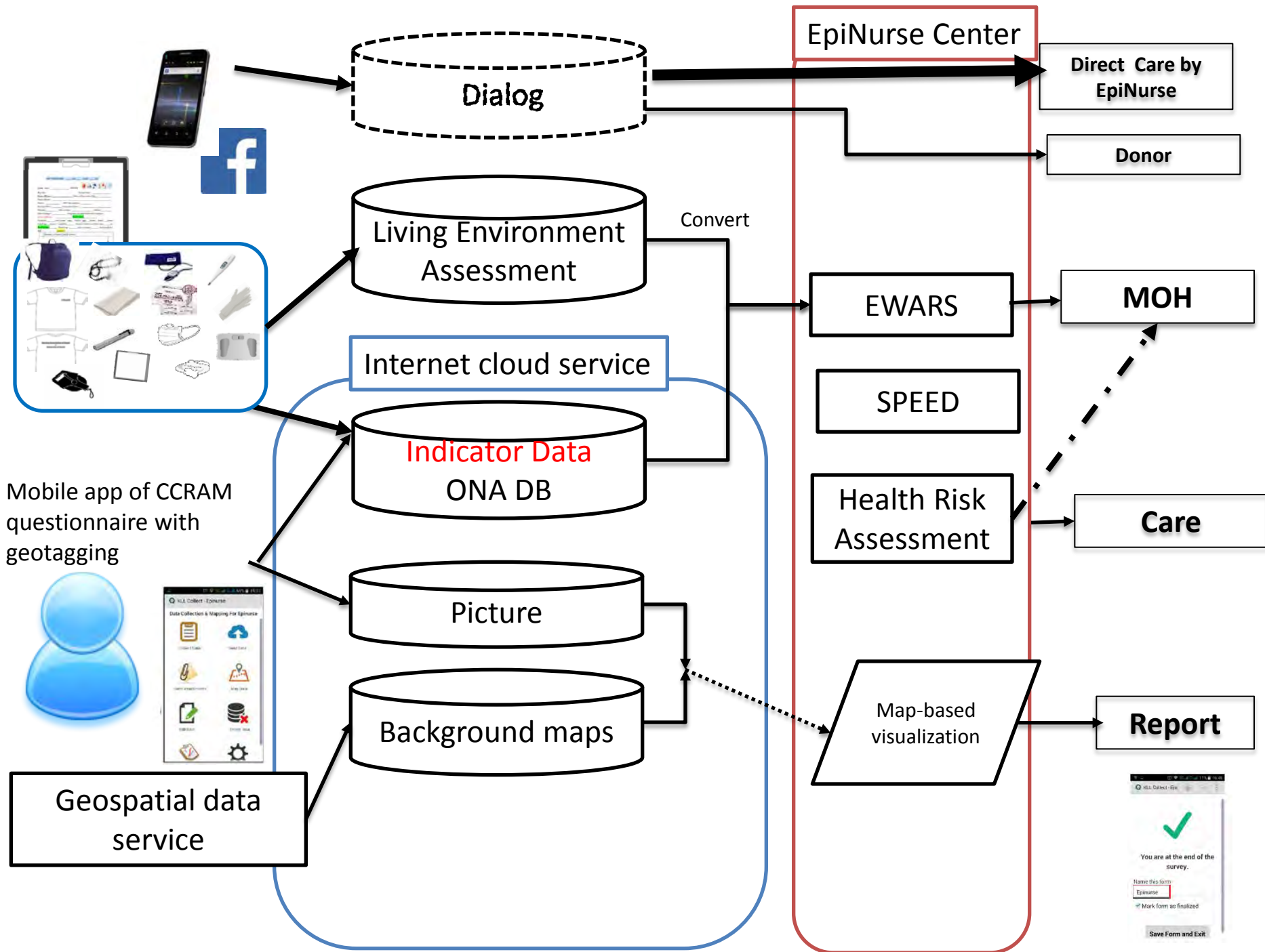
J-rapid Monitoring tool bag




or

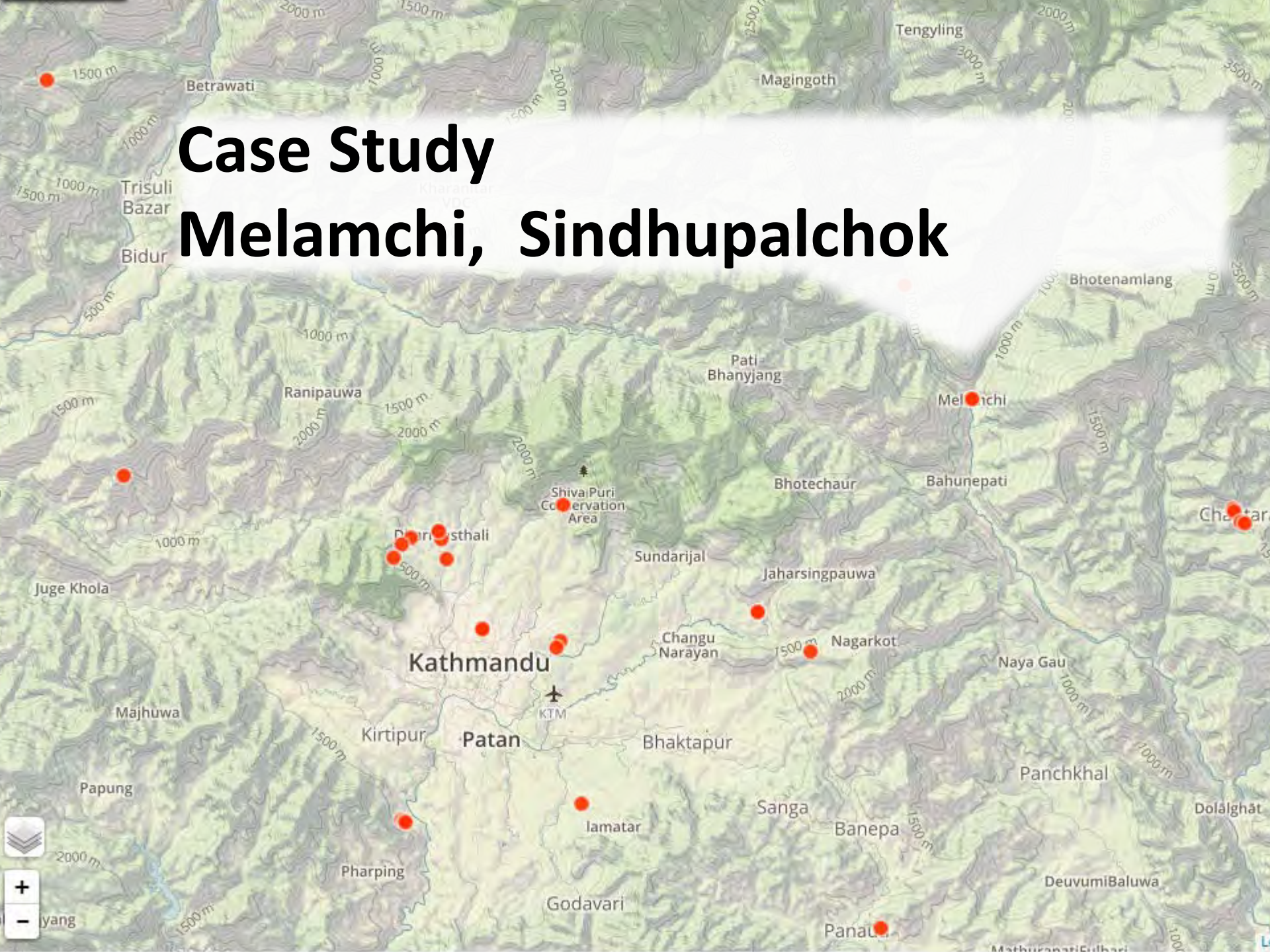



Develop by Philippines



Case Study

Melamchi, Sindhupalchok



Basic Reference Value of Living Environment(2012)

Households N= 1179

Mud bonded bricks/stone
85.7%

Roof of the House =
Galvanized iron
76.5%

Drinking water Tap
66.6%

Drinking water Spout
28.5%

Cycle 1.0%

Motor 0.8%

Fuel for Cooking = Wood
80.1%

Motor- cycle
5.2%

Radio 39.6%

Television
39.6%

Cable Television
24.3%

Computer
5.7%

Internet 3.1%

Mobile Phone
74.4%

Telephone
4.9%

Basic Reference Value of Living Environment(2012)

Residents N= 5230

Gender

Male 48.4%

Female 51.6%

60 – 75 6.7%

75+ 2.0%

Ethnics

Brahman – Hill 32.3%

Tamang 28.0%

Newar 10.1%

Sarki 3.0%

Damai/Dholi 1.9%

Kami 1.6%

Sanyasi/Dashnami 1.4%

Mother Tongue

Nepali 53.0%

Tamang 27.4%

Newar 9.4%

Literacy

Can read & write 58.0%

Can read only 4.9%

Can't read & write 29.4%

(Male) 10.1%

(Female) 19.4%

Disability

Physical 1.1%

Blindness/low vision 0.6%

Deaf 0.3%

Emergency Drill Experience **No**
Disaster experience **thunderstorm and accident in the hospital.**

WASH training by WHO one year before Quake

Aftermath of Disaster

Doctors, CMA and nurses were so busy.
No foods to cook.

PHC knows about the disaster management but they are not prepared, didn't know whom to co-ordinate
We have very **less manpower**

Daily there are about 150 patient and 4 to 5 critical patient to bed.

We have about 45 delivery cases in a month
Other hospitals are difficult to access
due to geographical reason.

EpiNurse as informant

Bachelor of Nursing

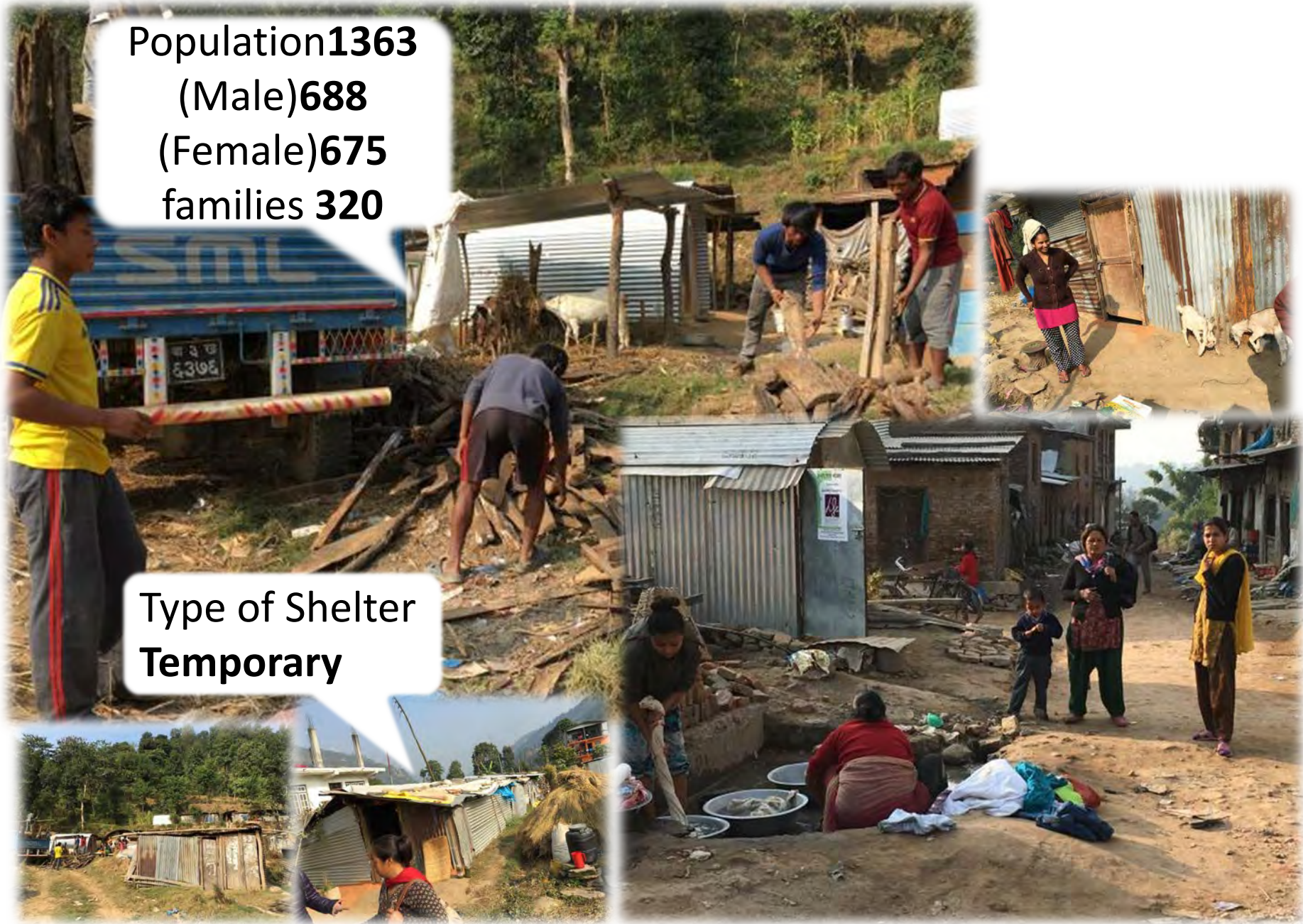
Working experience: 16 years



Melamchi 2 Report on April 23 2016

Population **1363**
(Male) **688**
(Female) **675**
families **320**

Type of Shelter
Temporary



Melamchi 2 Report on April 23 2016



Security **No**
Tap water
Water Supply **No**

Melamchi 2 Report on April 23 2016



Melamchi 2 Report on April 23 2016



Toilet **48**

Adequate number of toilets **Yes**

Hand-washing **Yes**

Soap **Yes**



Melamchi 2 Report on April 23 2016

electricity **Yes**

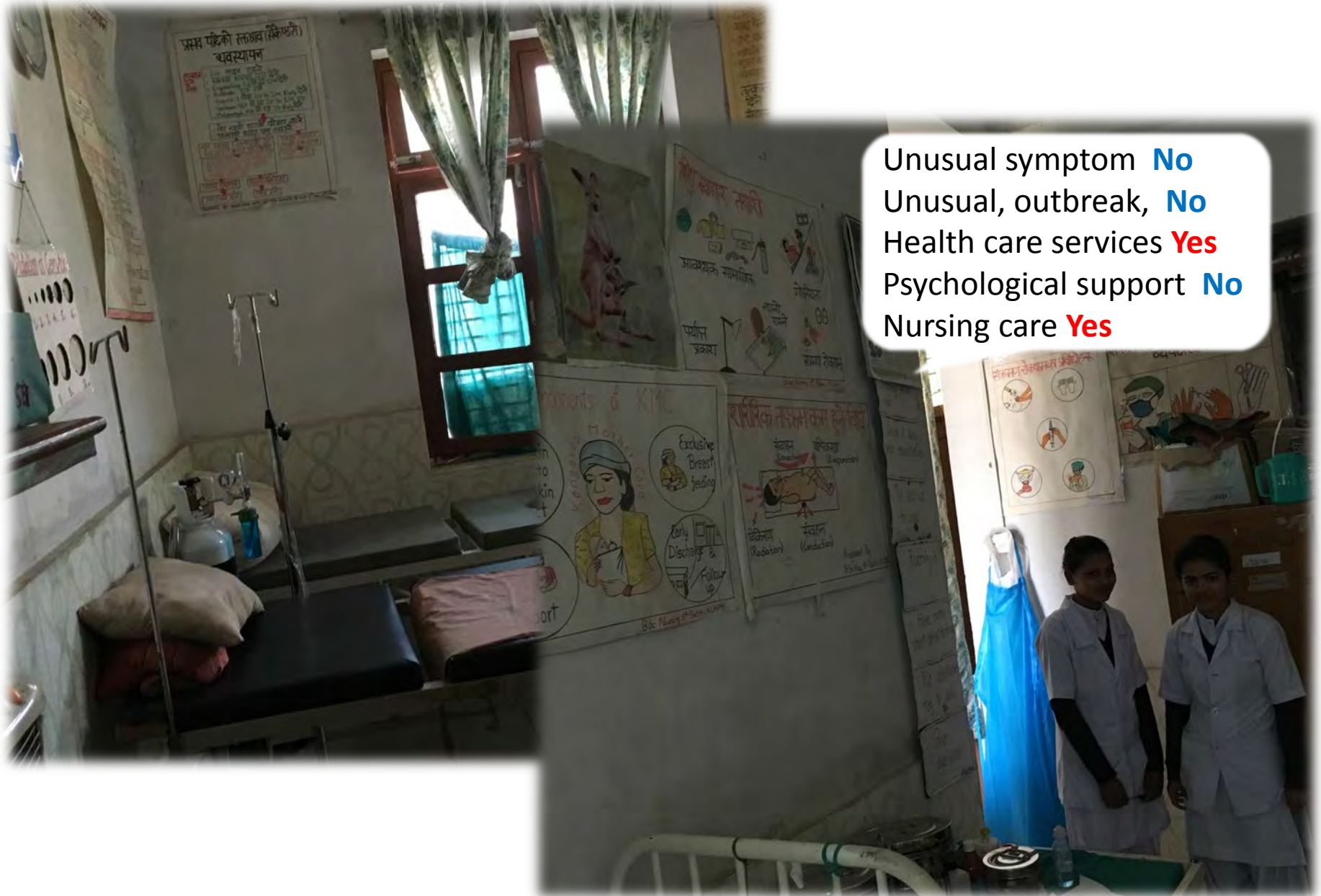


Melamchi 2 Report on April 23 2016

Acceptable spacing **No**
Acceptable cleanliness **No**
Blanket **No**

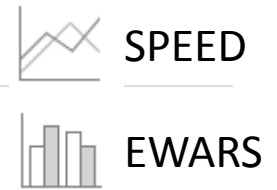


Melamchi 2 Report on April 23 2016



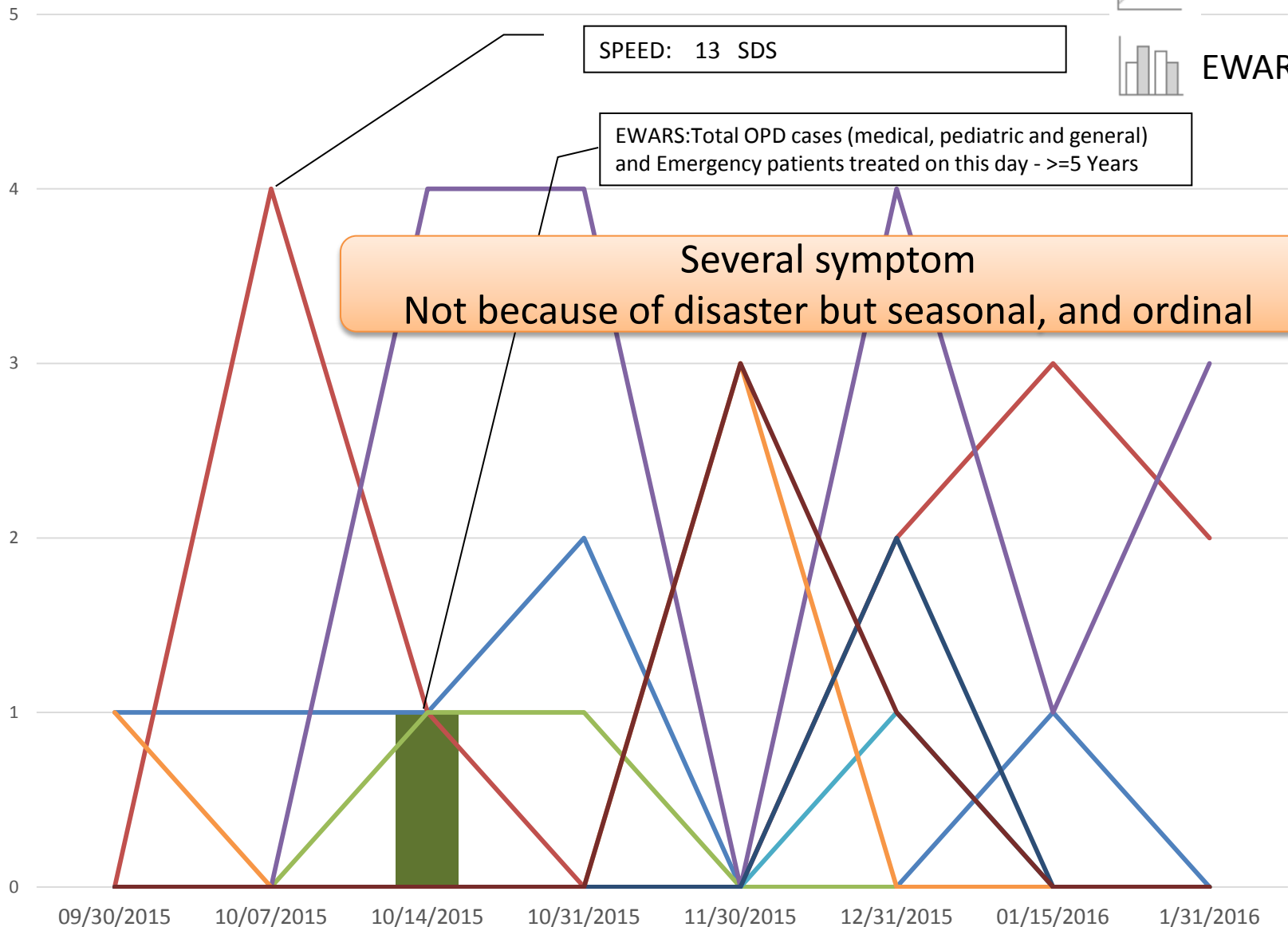
Unusual symptom **No**
Unusual, outbreak, **No**
Health care services **Yes**
Psychological support **No**
Nursing care **Yes**

Melamchi-2 ≥ 5



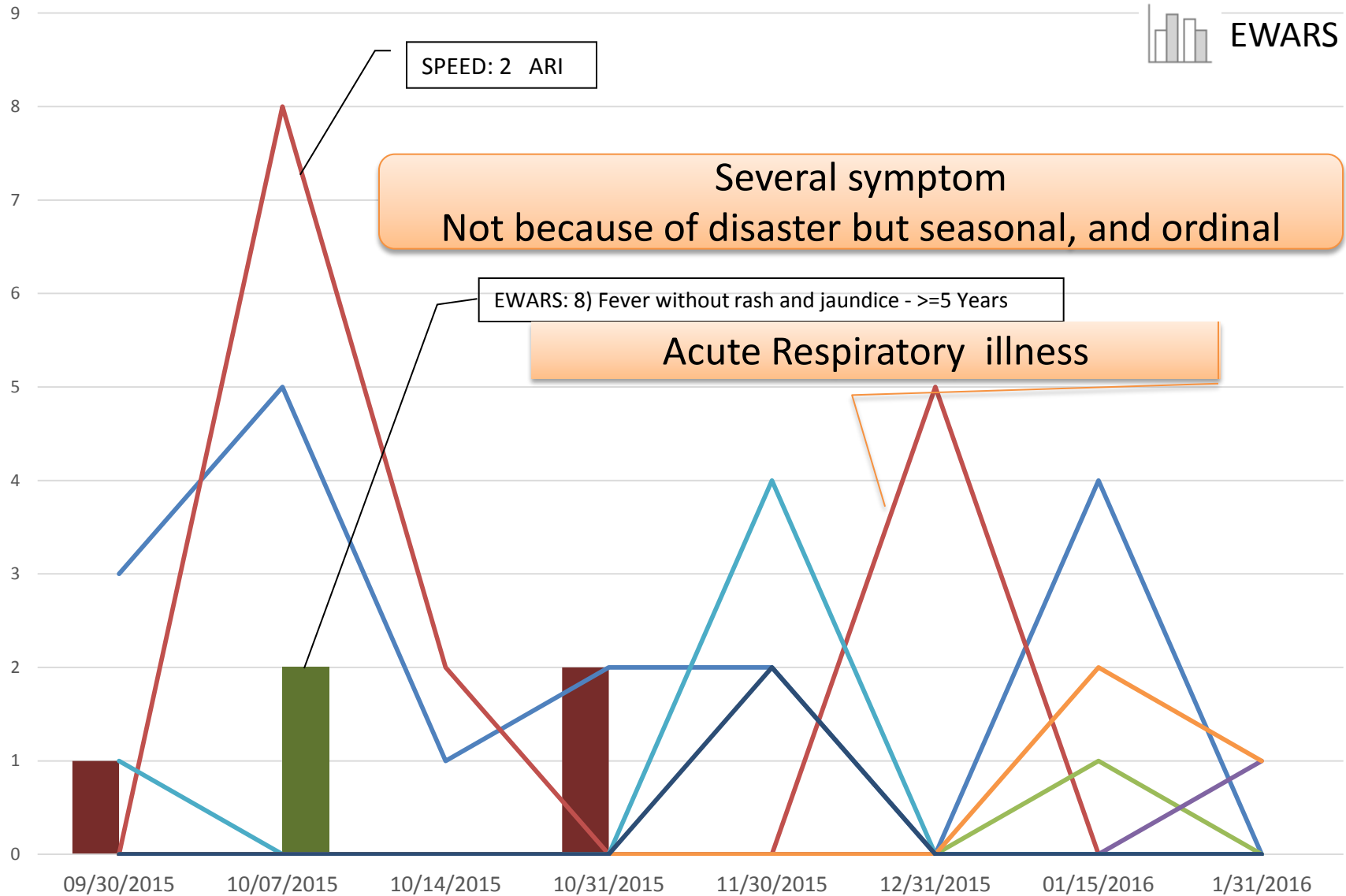
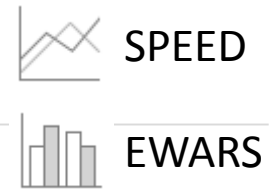
SPEED: 13 SDS

EWARS: Total OPD cases (medical, pediatric and general) and Emergency patients treated on this day - ≥ 5 Years

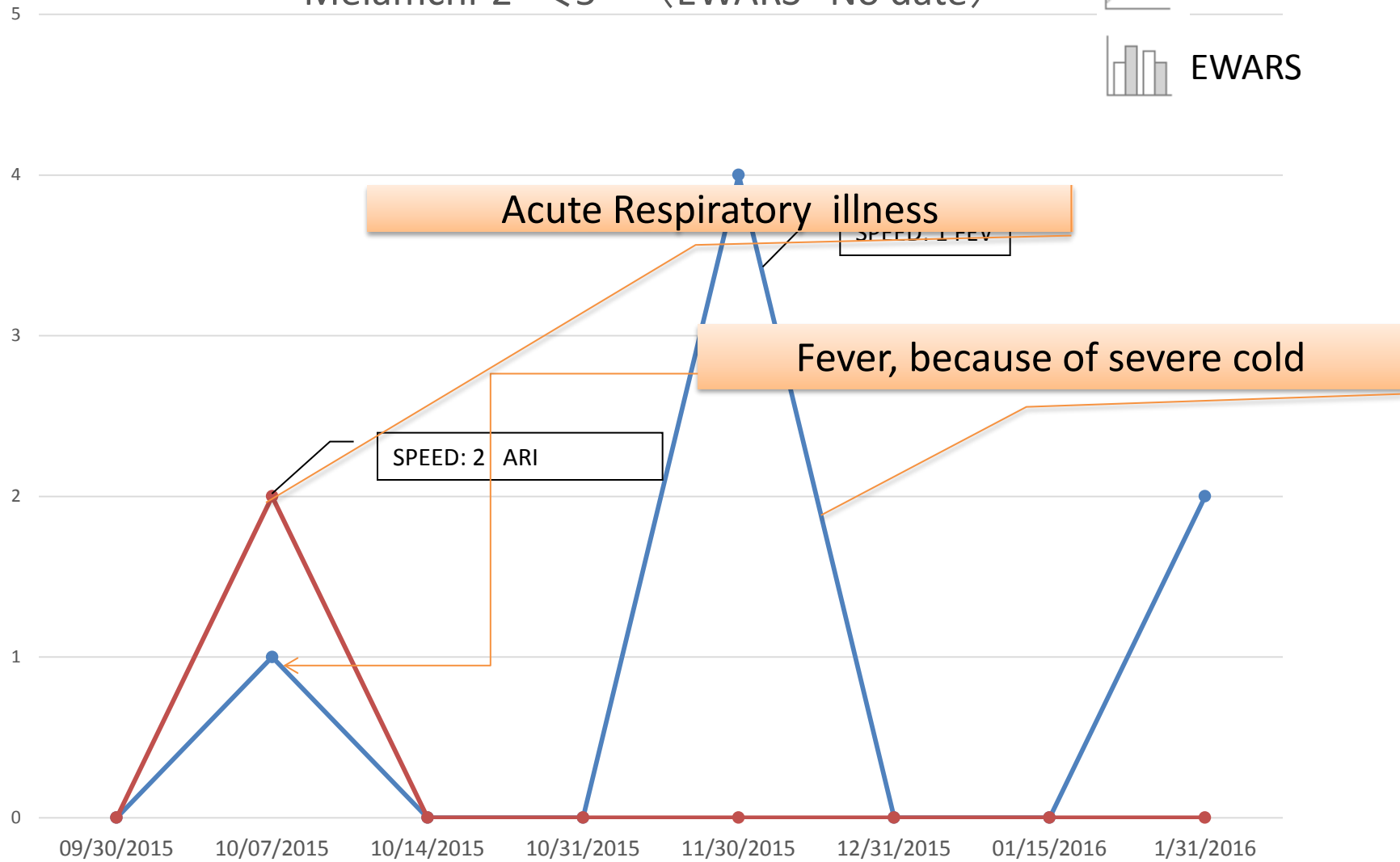
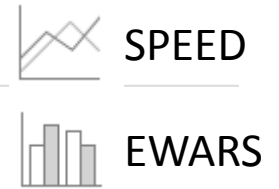


Several symptom
Not because of disaster but seasonal, and ordinal

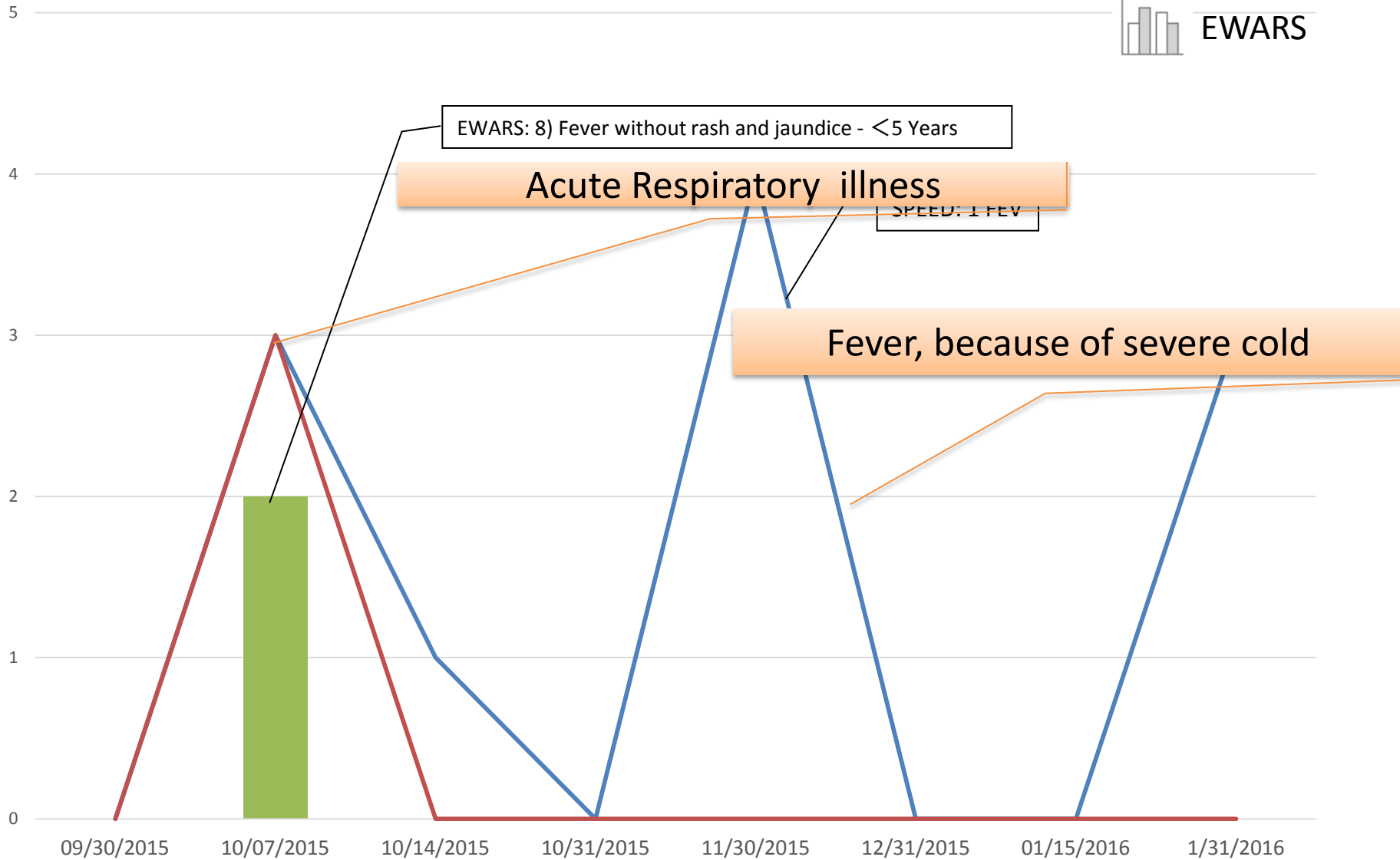
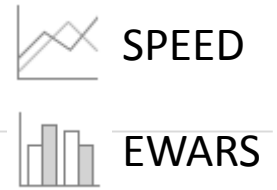
Melamchi-5 ≥ 5



Melamchi-2 <5 (EWARS No date)



Melamchi-5 <5



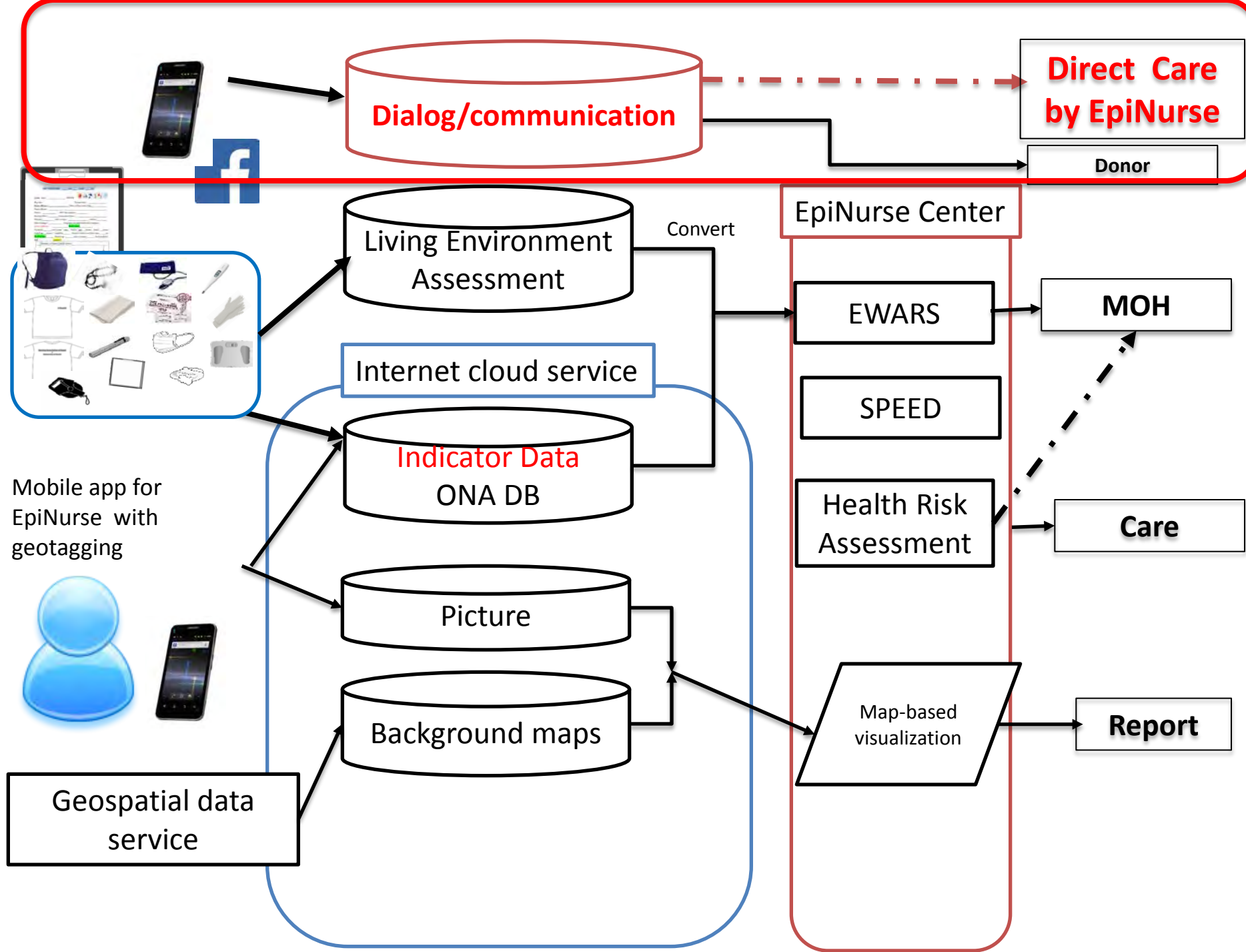


EpiNurse works as cure giver

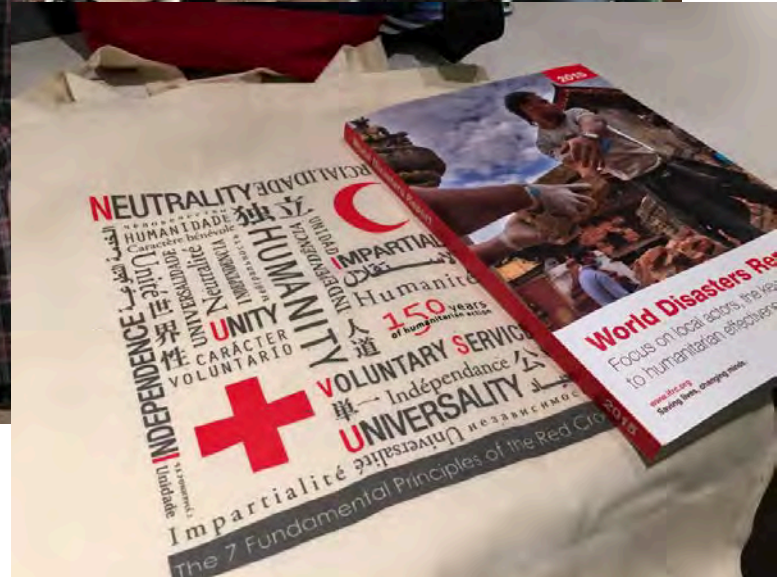


Need not report up and
inhospitalization but need direct care
and common medication





Connect to Japan Red Cross





Case Study

Damgade, Dhading



EpiNurse Center NAN by J-rapidさんはSharada Barakoti さんと一緒にです

作成者: Sushila Paudel [?] · 2015年10月18日 ·

Health teaching by Sharada Barakoti in Lapabasti, Dhading

Participants : Secretary of Lapa basti Management Committee, Teachers,
School children and house wives.

Included topic - Holistic Hygiene, ANC care, water purification and
prevention of communicable disease.



Epinurse Sharada Barakoti from shelter Lapa Basti, Dhading, performing very well on the survey. She is planning a health teaching to a leading group of her shelter and mobilizing them as needed. She is also planning a campaign for vaccination, nutritional assessment and a general health camp.



2016 January, Dhading

Epinurses
themselves sought
out for common
medicines to
provide in shelters.





Case Study

Padma Tower, Kathmandu



Apr. 2016↓

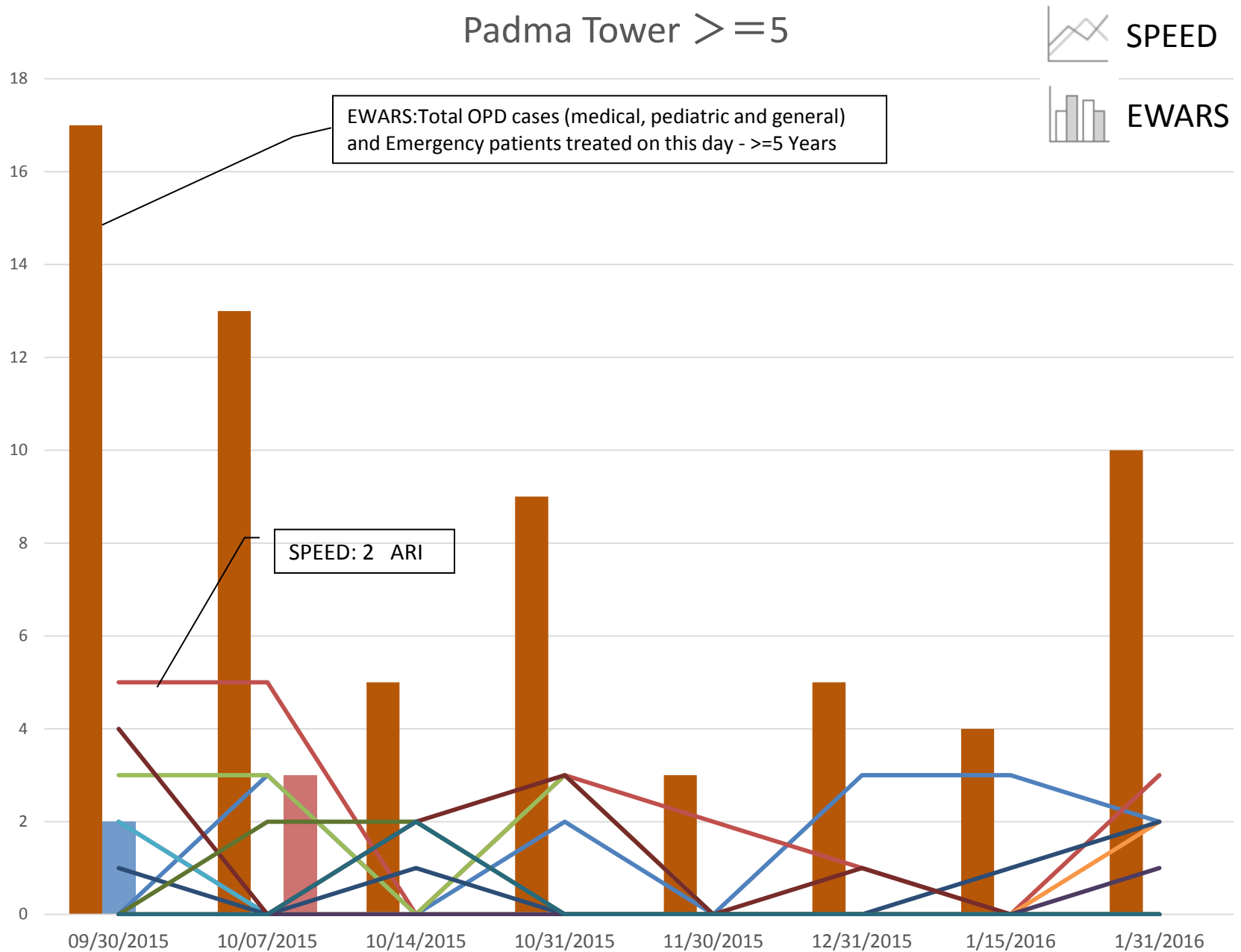
Aug. 2015↑



Direct care by EpiNurse



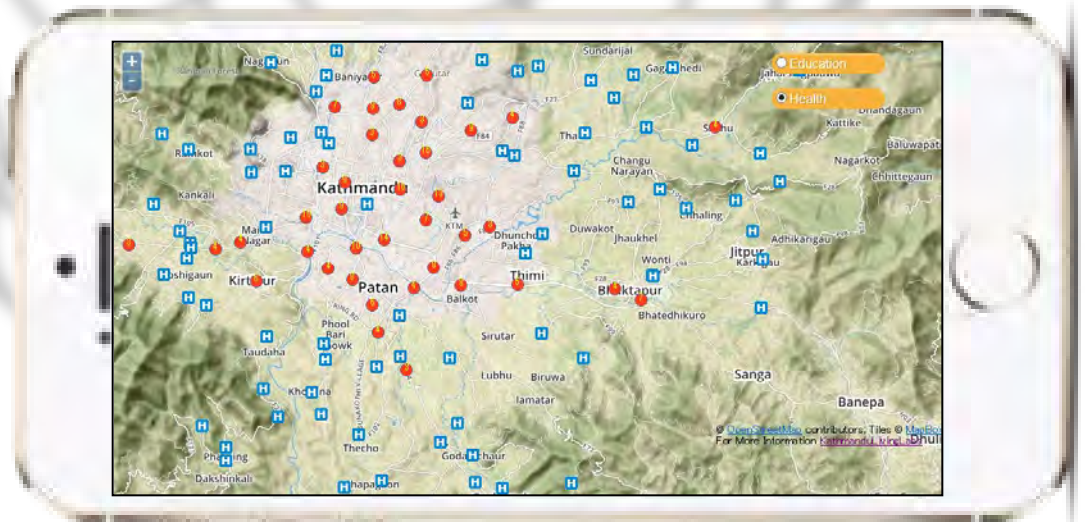
Padma Tower ≥ 5





As Geo spatial aspect

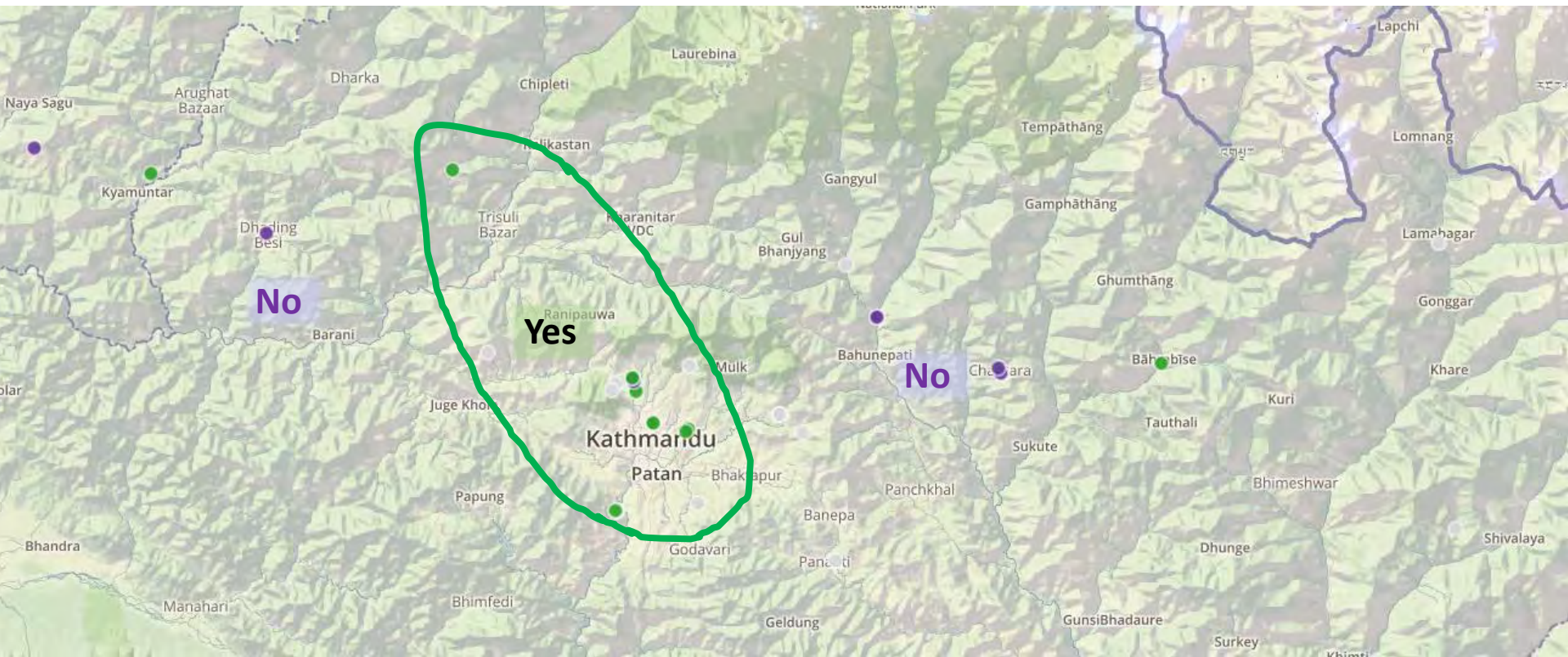
Open Street Map



1. Adequate Water Supply

● Yes

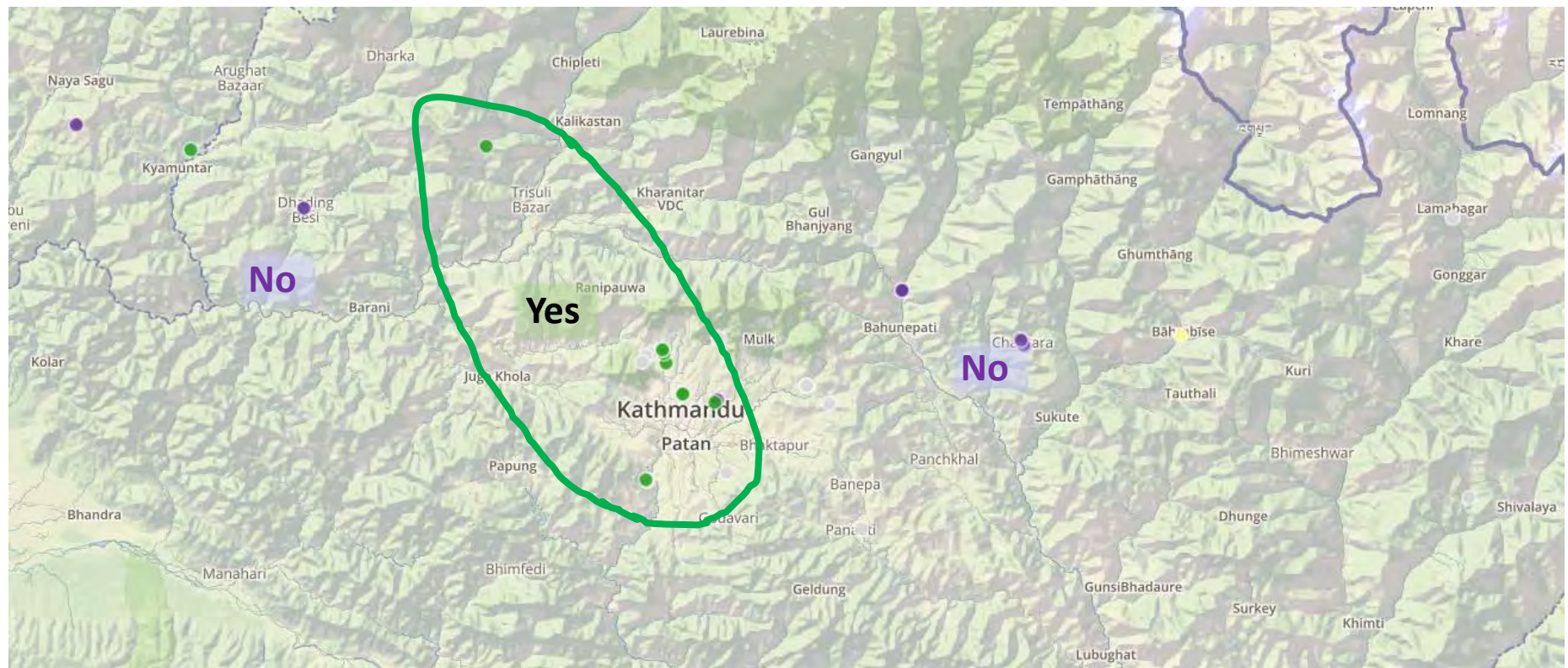
● No



2.Safe and clean food items provision

● Yes

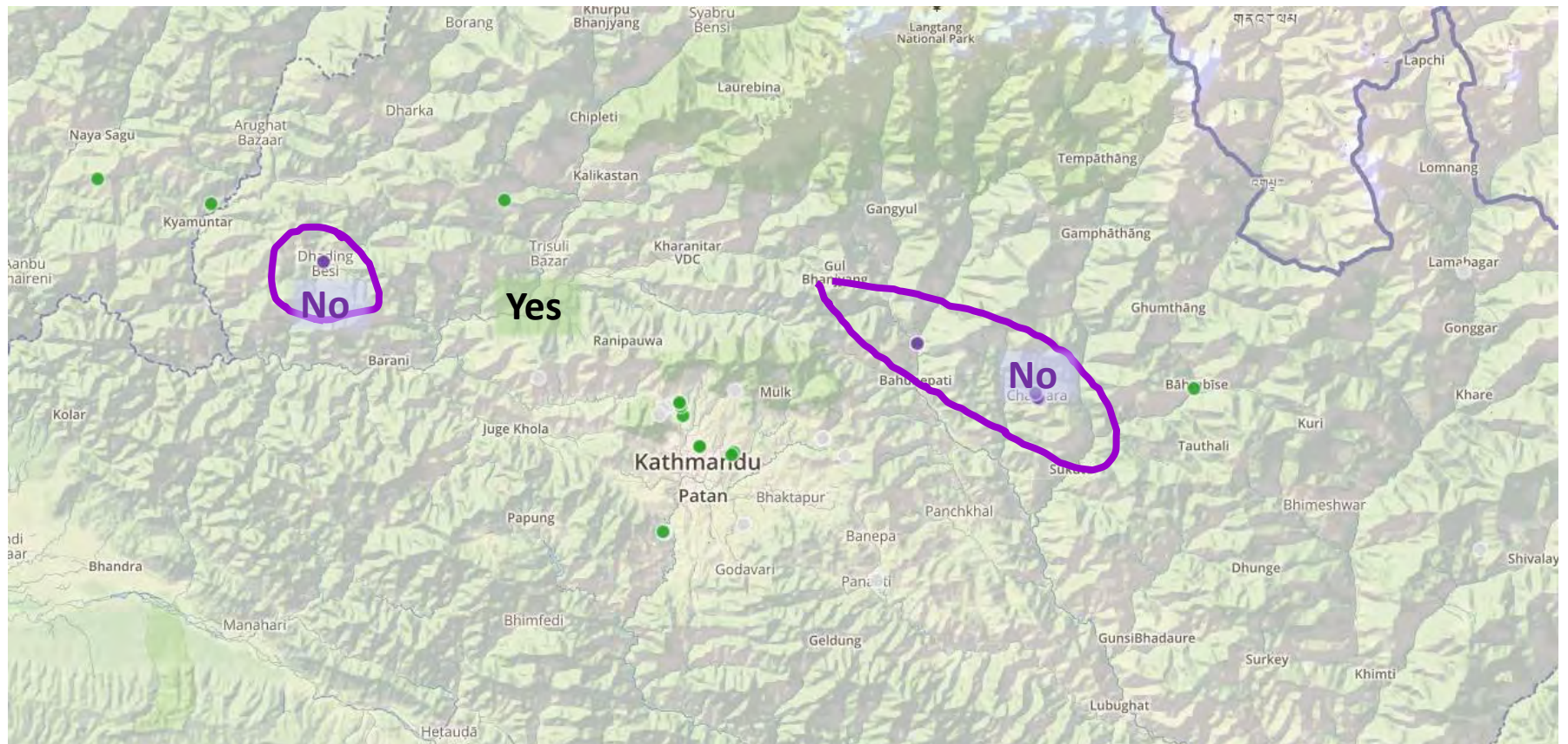
● No



3. Clothing

● Yes

● No



4. Blanket or other items

● Yes

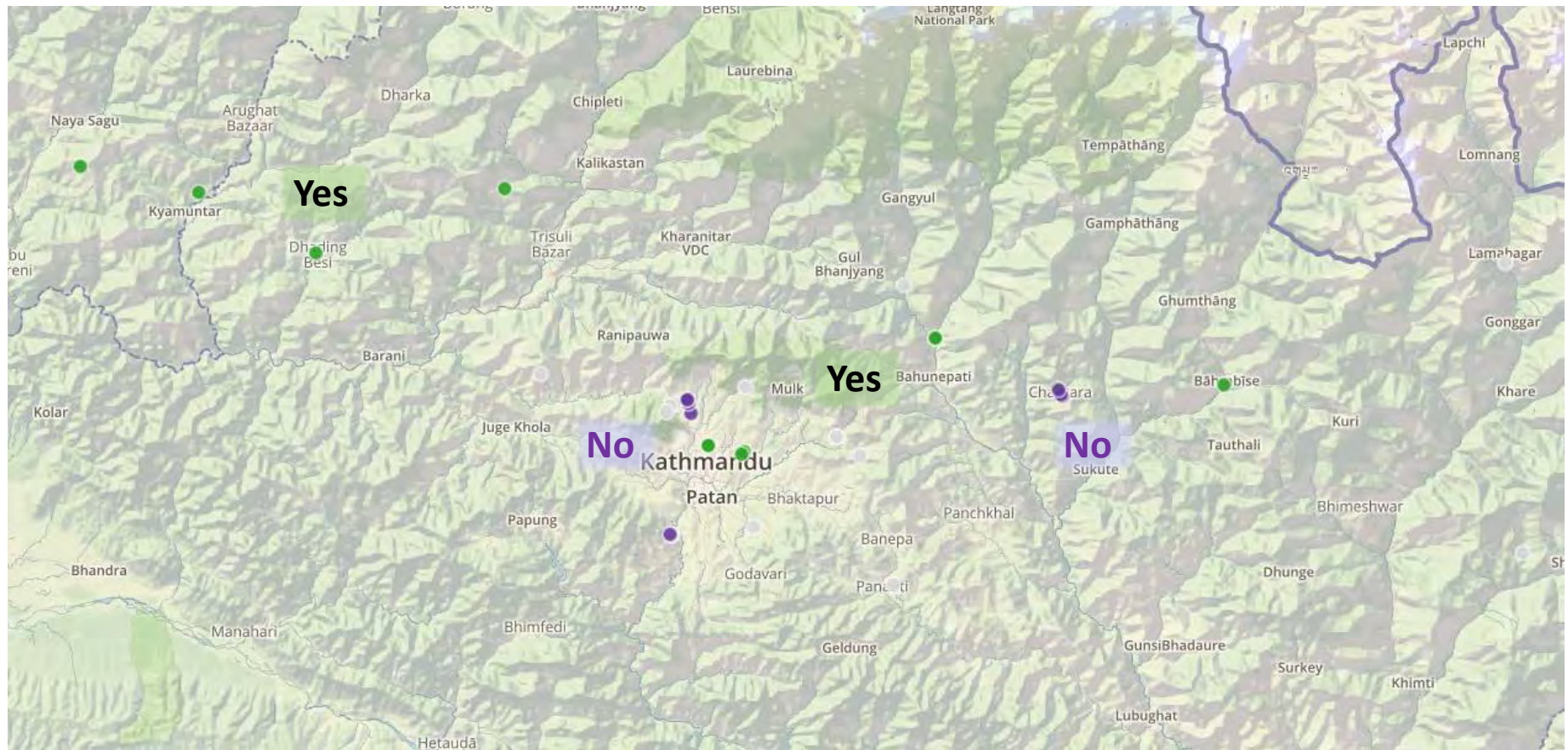
● No



5. Soap Available

● Yes

● No



6. Hand-washing facilities

● Yes

● No



7. Non-food item

● Yes

● No



8. Adequate number of toilets

● No

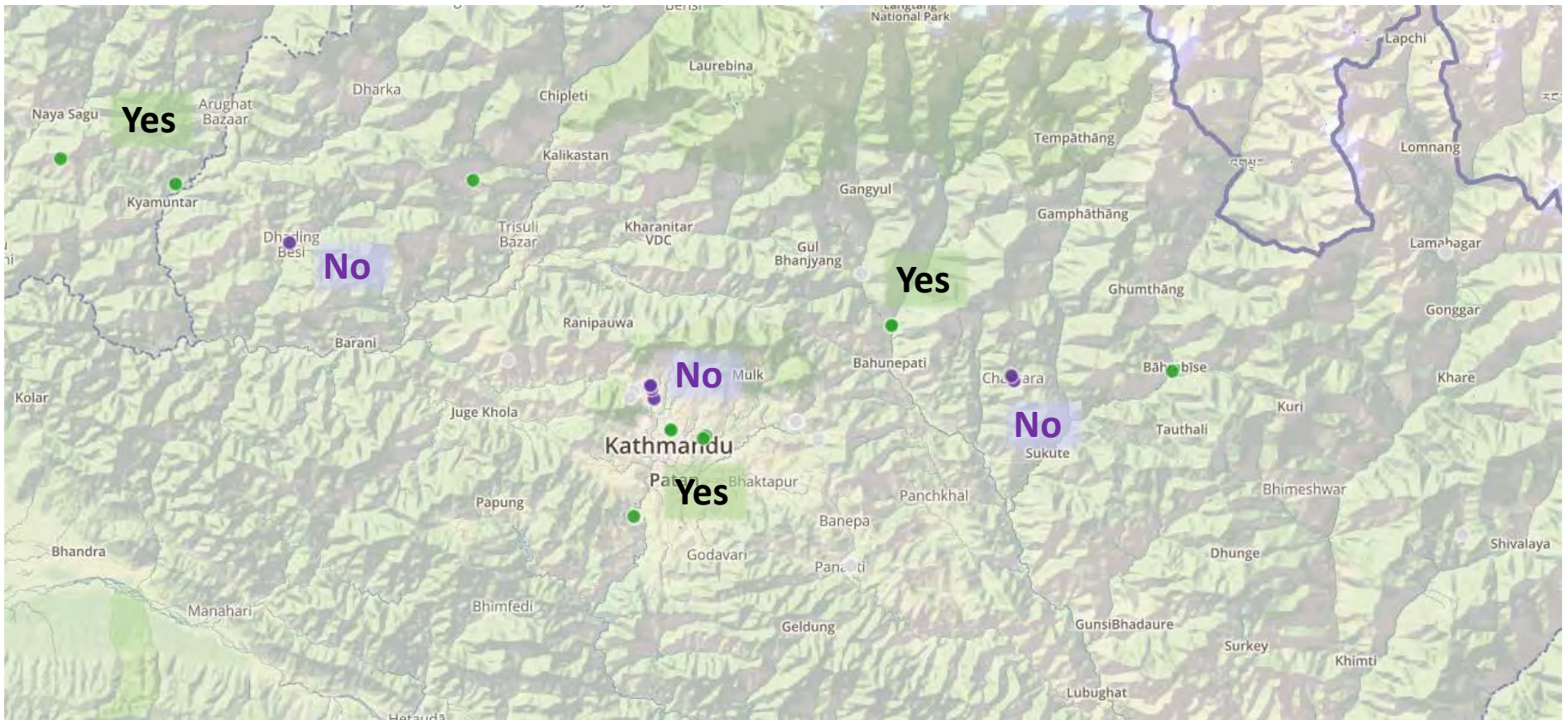
● Yes



9. Kitchen

● Yes

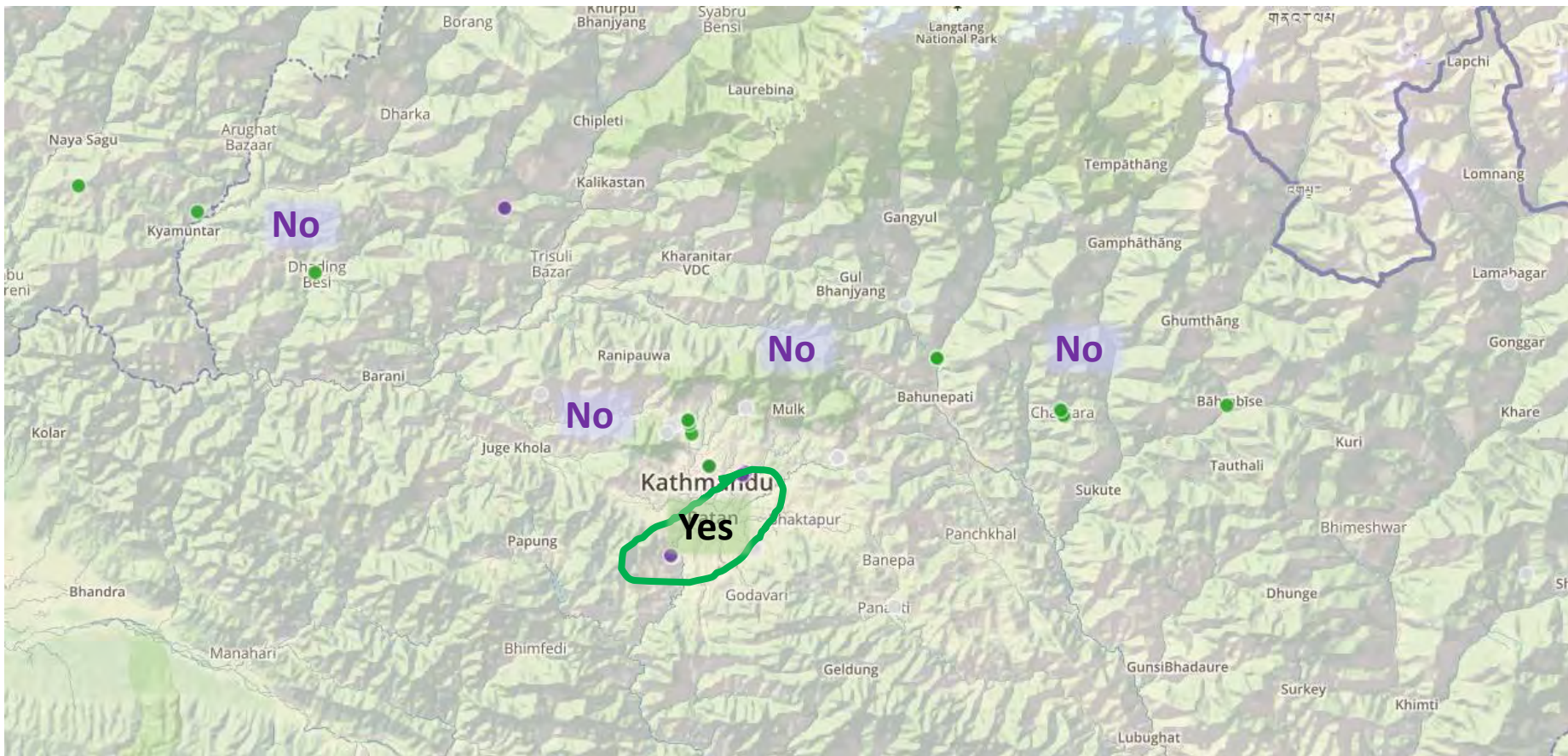
● No



10. Appropriate waste storage

☒ No

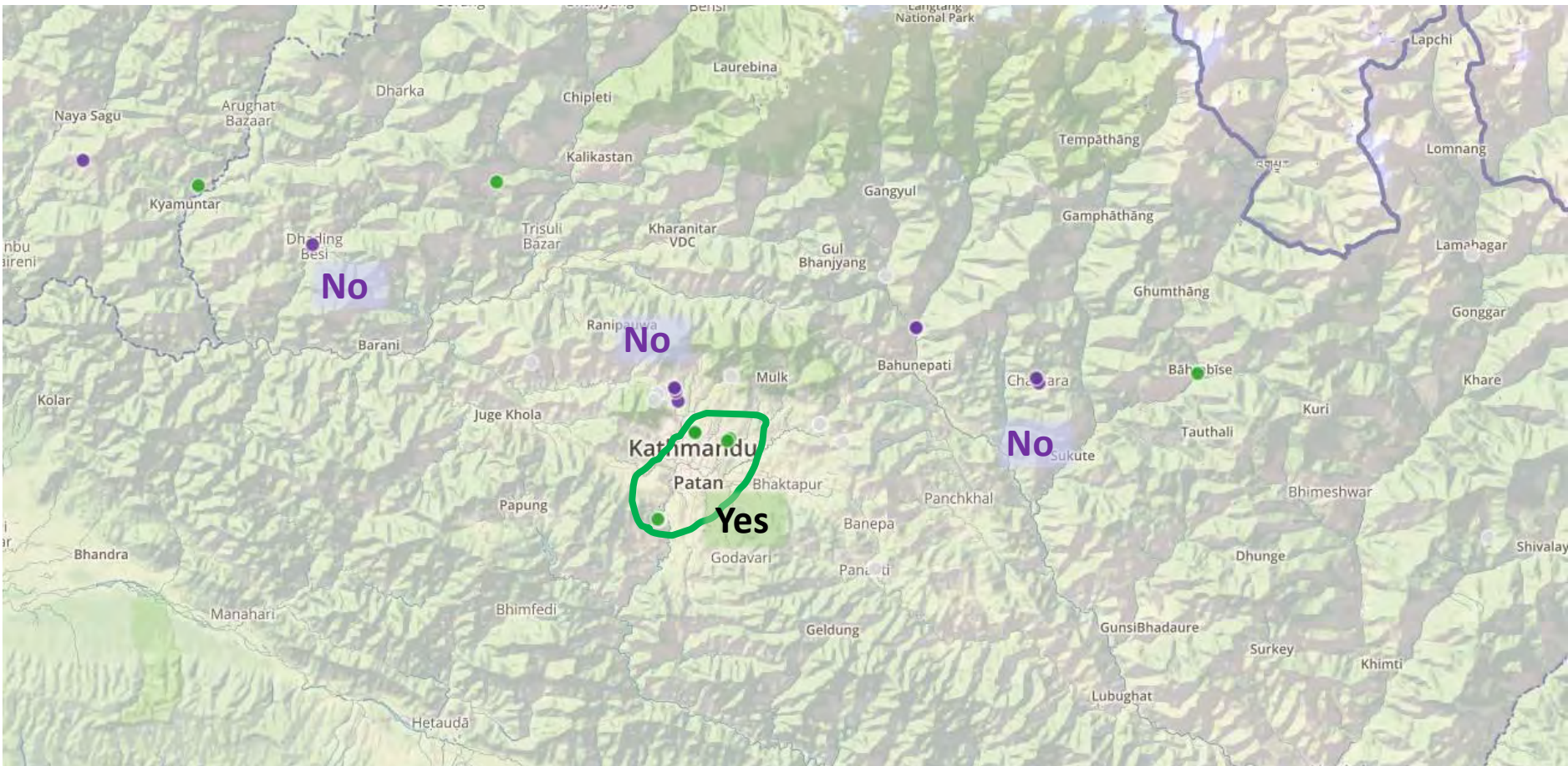
☒ Yes



11. Acceptable cleanliness

● Yes

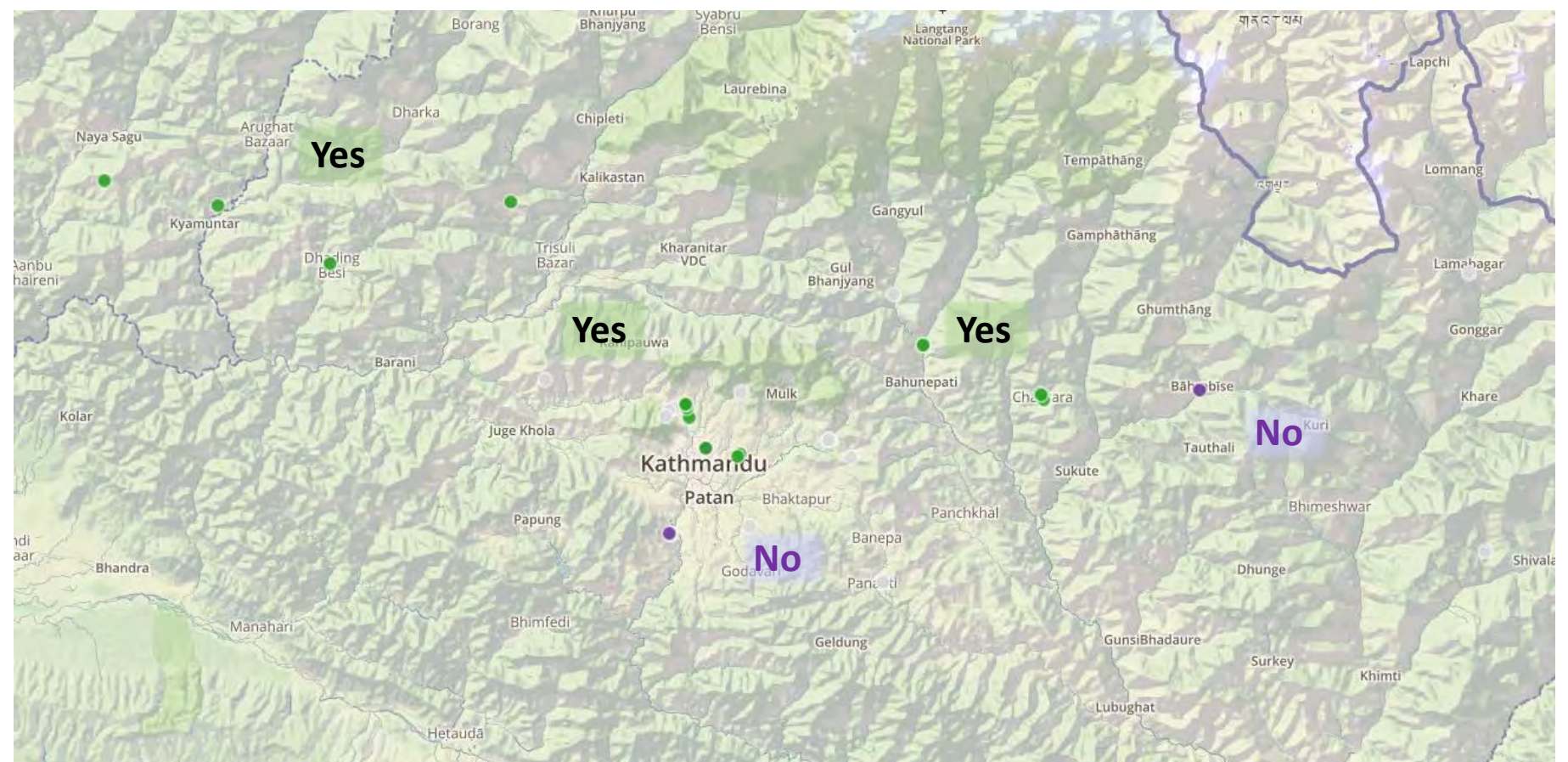
● No



12. Acceptable spacing

● Yes

● No



13. Source of light (electricity)

☒ Yes

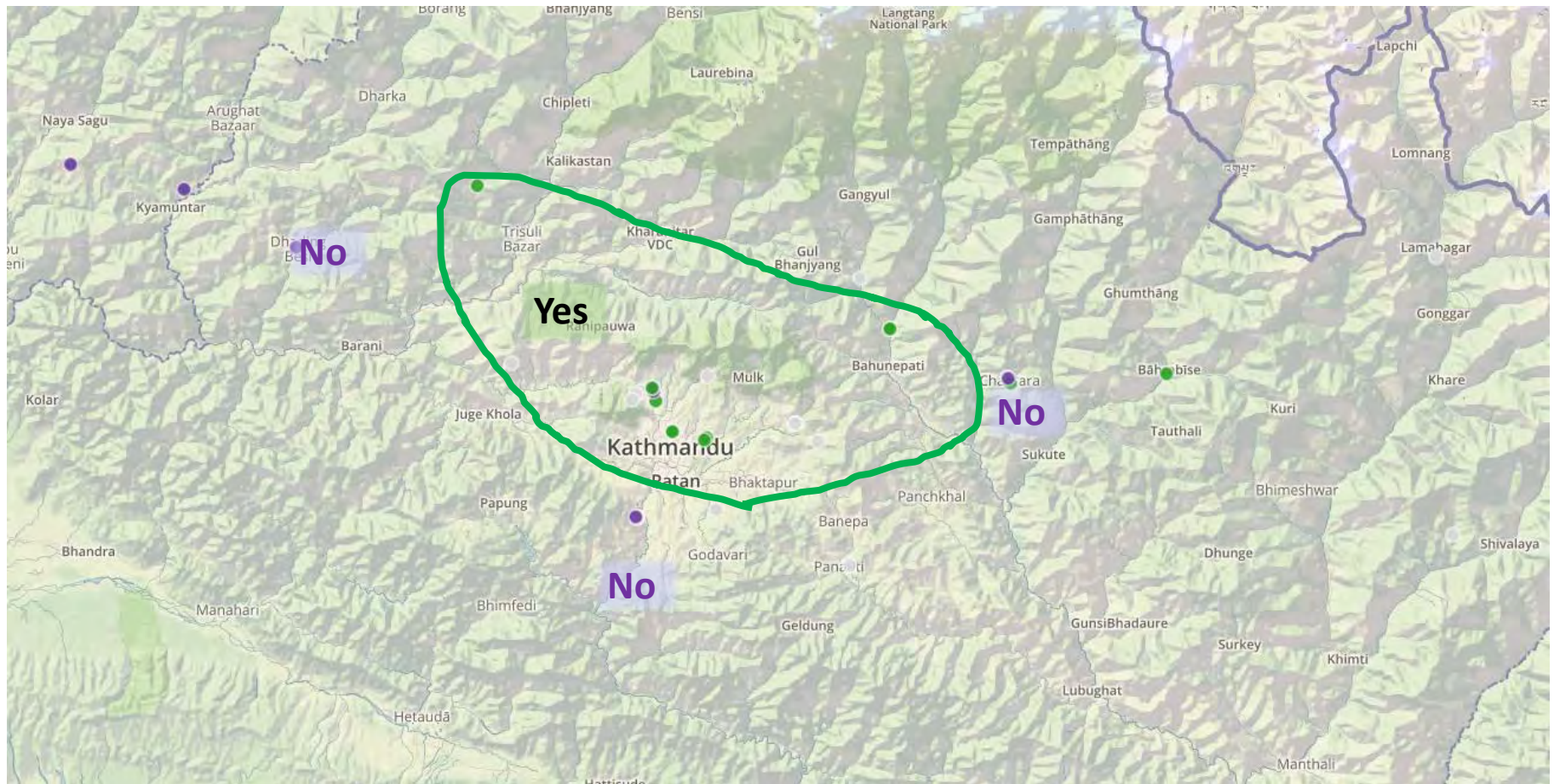
☐ No



14. Health care services on site

☒ Yes

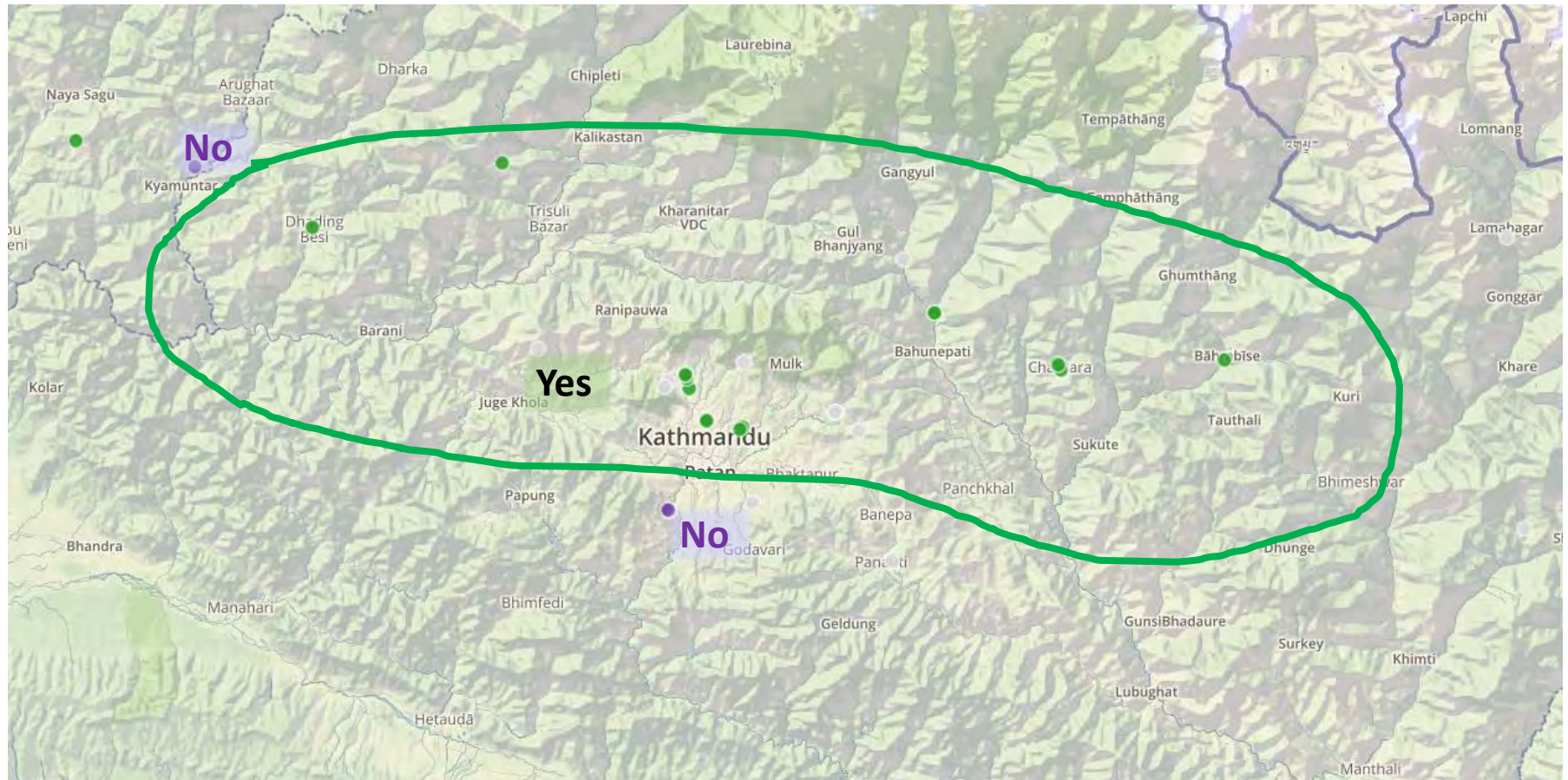
☐ No



15. Nursing care

● Yes

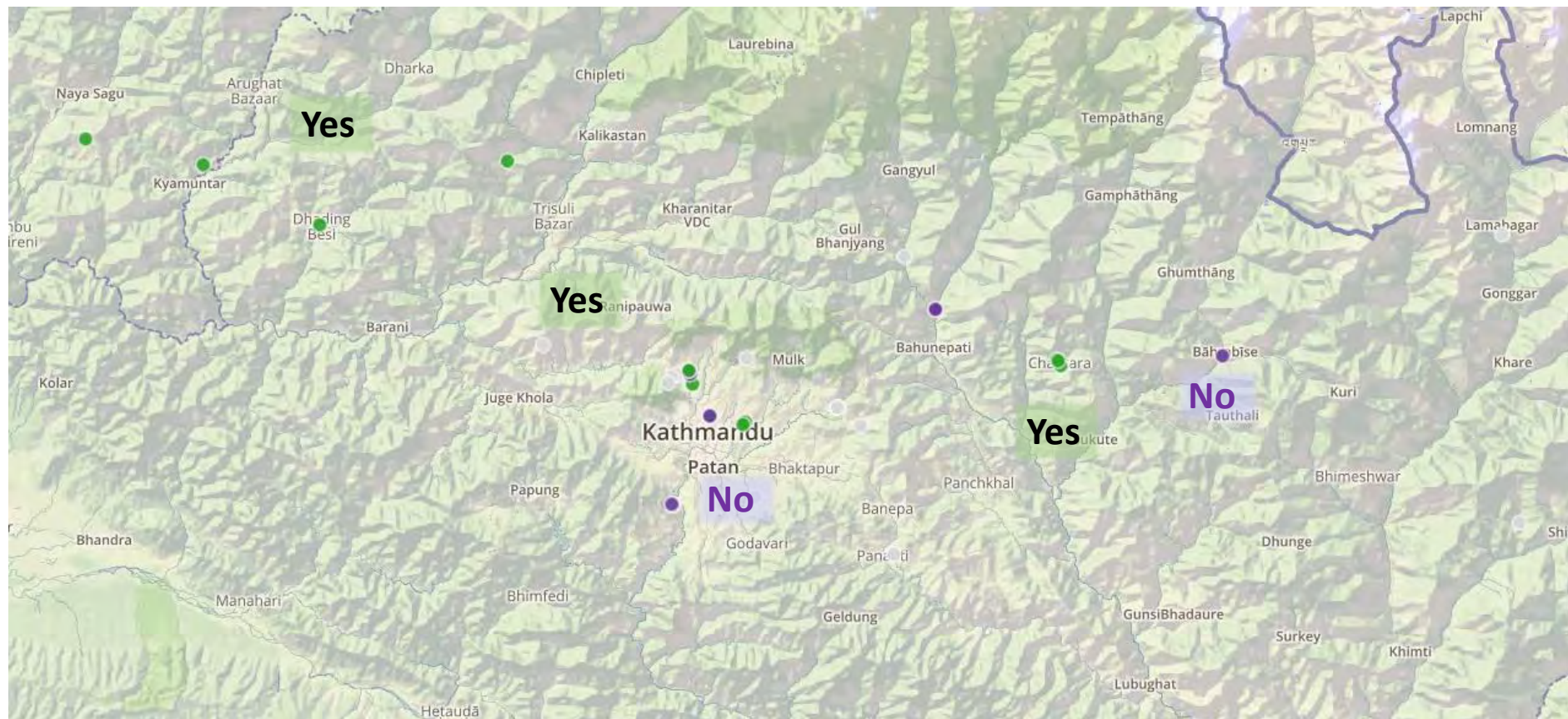
● No



16. Psychological support/counseling

● Yes

● No



Group Discussion

“EpiNurses 1 year” lesson learned by JST



Barrier of Health Management after Disaster

from Focus group discussion on April 2016

Problem

Lack of Communication and Media

Geographical Condition

Not proper System Meeting

Lack of Disaster Training

Lack of Monitoring and Evaluation

Not Proper working Environment

Not Proper supply and logistics

Post disaster monitoring

Proposed solution

Promotion of media through Radio, television
Mobile, Magazine

Mobilize locally available resources
- Facility: Stretcher, Ambulance
- Human Resource
- Road

Stake holder meeting

Disaster Management Training

Recording, Reporting
Regular Supervision
Appreciation and rewards

for health insurance and basic needs

Adequate supply of goods and stocks

Case finding by Social Capital

Issue faced on Community Monitoring

(Difficulties of people centered & bottom up approach)

- Geographic information of tentative migration point
- Unavailability of IT infrastructure
- Unaccessibility to data
- Visualize uncountable data
- Validity and reliability
- Reasonable crosscut point to report up
- Population coverage to ensure that no one is left behind

Suggestions

- **Reliable communication** and information technology.
- Need effective and **systematic planning to provide relief** according to the geographical region.
- **System must be** created to find out, address and provide the **solution of the problem not only relief to disaster damage.**
- **Drill and stimulation of disaster** must be done in certain span of time to all the staffs to make them awake, ready to face the problem and react quickly as possible **to provide materials or utilities which will impact the health and concept of victims.**
- Effective and efficient management must be developed **to manage human resources and distribute basic materials, utilities** and medicines to the affected area.
- **Community's health** must be prioritized and address **as basic need.**
- Related organizations and **local government** have to plan and **prepare all the human resources** to be responsible

Problem

For sustainable monitoring

Public health area

- Disease –Based
- Retrospective

Routine Health Care Reporting

- Self-reported
- Inclusive
- Periodical
- Sentinel

Paper-based databases



Integrated model

Human Centered Indicator Innovation

Self- Care

Event be reporting for emergency

- Modifiable Items
- Risk finding
- Existence Check
- Various Channels

Hospital



EpiNurse



Future Society
Sustainable Human Security

Contribution to
SDGs & SFDRR Indicators

Situation of Community
Health / Health Crisis
Detection Report

- ✓ Ordinary use enables us to use for emergency
- ✓ Open Source
- ✓ Participatory

Policy
Emergency
Response

Government

Health
Administration

Disaster
management



Disaster Area

- Undefined population
- Unknown disease
- Disaggregated
- Intermittent

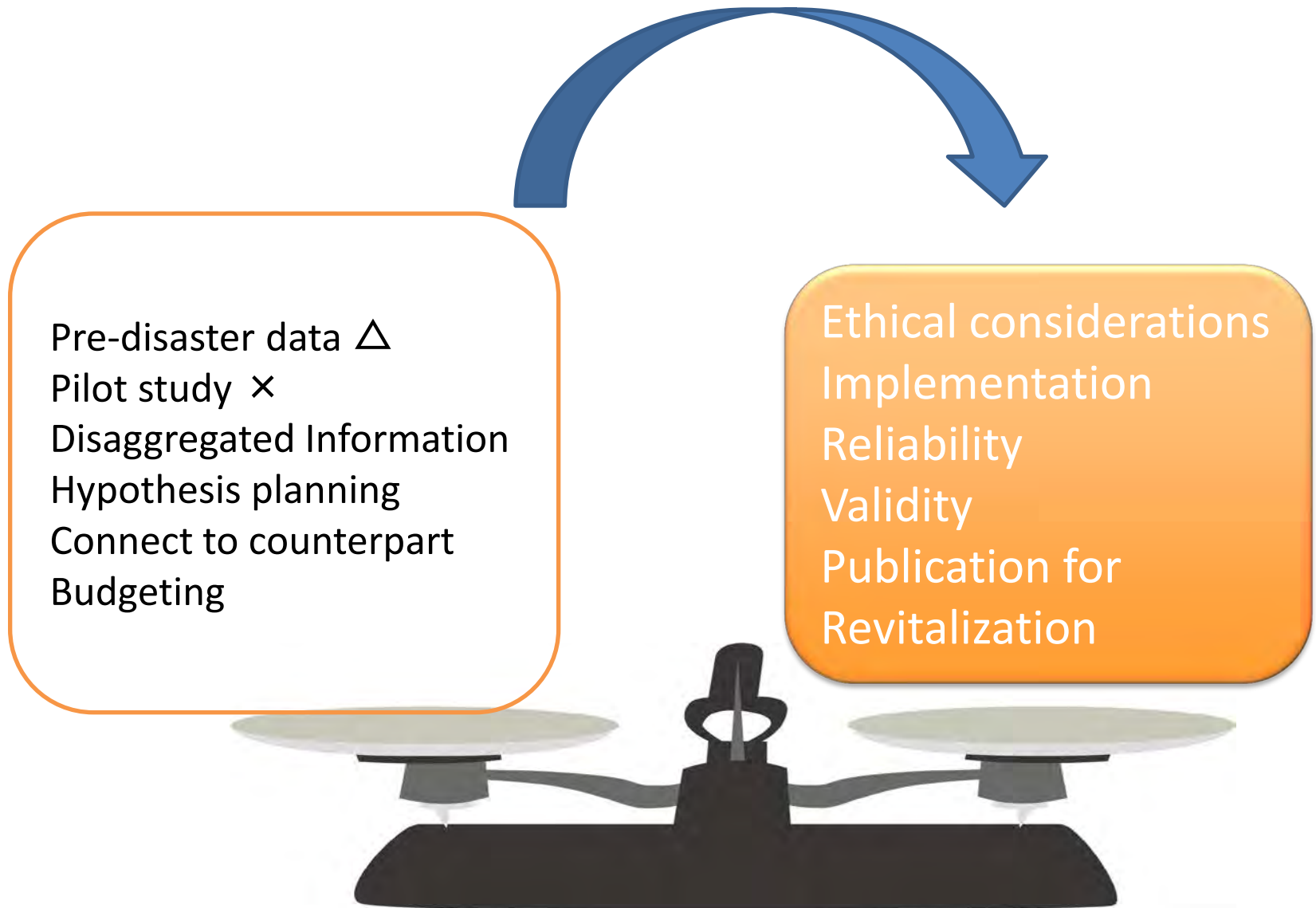
Feedback to policy maker and discuss future capacity building



Discussion

- Interoperability with other data services for further cooperation with other sectors, such as infrastructure, energy, transport, and water.
- Close partnerships with local volunteers of geospatial data development, such as Open Street Maps

Challenge during Disaster Research



Thank you

Learn preparedness in Japan



県の南海トラフ巨大地震対策について説明を受けるポカレル会長（左）ら（県庁で）

ネパール看護協会 県災害対策学ぶ

会長ら県庁訪問

昨年4月に大地震が発生したネパールの看護協会会長ら4人が来日し、12日、県庁を訪問。県の災害対策への取り組みについて学んだ。

タラ・ポカレル・ネパール看護協会会長(62)ら4人。9～14日の予定で日本に滞在し、県立大で災害看護について学んだほか、県内の津波避難タワーなどを見学している。

この日は、県庁で、竹崎幸博・南海トラフ地震対策

西部



花粉情報
きょう

14日
(日)

15日
(月)

課長が、南海トラフ巨大地震対策の取り組みについて説明。住宅耐震化率と、津波早期避難率、津波避難空間の整備率を100%にすることで、死者を大幅に減らせることなど、防災の重要性を強調した。

ポカレル会長は「これまでネパールでは、災害後はどう対処するかに重点を置き、災害を想定して、被害を減らすという考え方はなかった。帰国したら、防災を行政に働きかけたい」と話していた。