



ICT access and use by Persons with Disabilities (PWD) in Nepal

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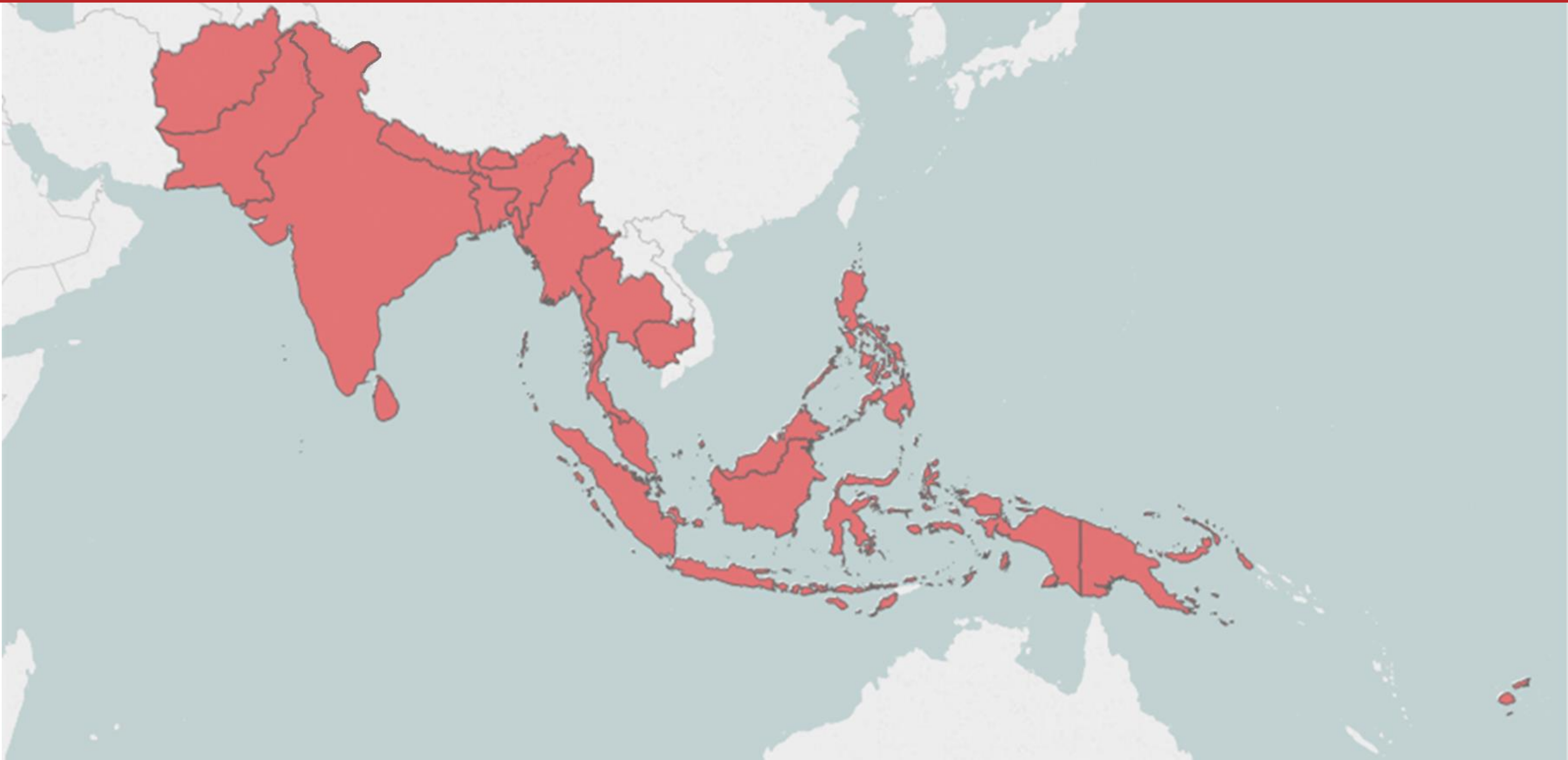
LIRNEasia: A pro-poor, pro-market Asia Pacific think tank with a focus on infrastructure policy and regulation

- Mission

- *Catalyzing policy change through research to improve people's lives in the emerging Asia Pacific by facilitating their use of hard and soft infrastructures through the use of knowledge, information and technology*

- In Nepal we have carried out research, made regulatory and policy recommendations, built capacity, and implemented solutions. Some examples:
 - Research on Nepal's Universal Service actions (in 2005-06)
 - Assessment of Nepal's emergency communication system (published 2016)
 - Training programs for govt, civil society, private sector, and media on broadband regulation and policy. In Nagarkot (2015) and in Dhulikel (2017). One more in 2019.
 - Workshop on disabled-friendly policies and ICT solutions (2017)
 - Hackathons to develop apps to help disabled persons in Nepal (2017-18)
 - Research on how disabled persons in Nepal could use ICTs towards independent living (field work underway)

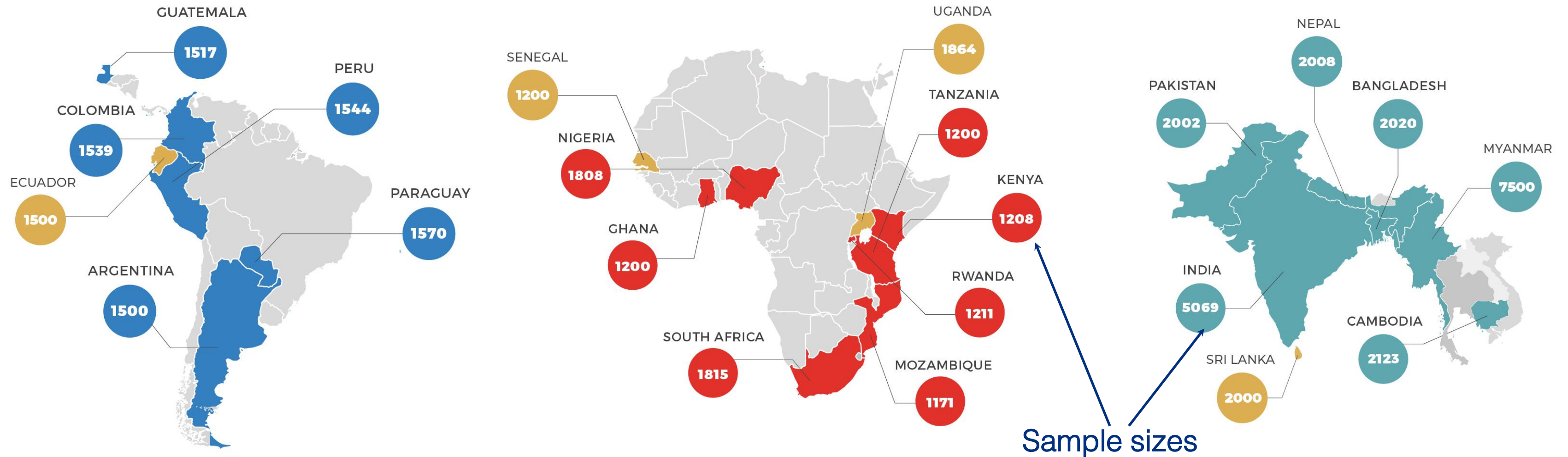
Countries we engage with



AfterAccess: Nationally representative surveys of ICT access and use by households & individuals aged 15-65 across Global South

- Rigorous sampling method, comparable across countries
- Common questionnaire with local customization
 - Structured, closed-ended responses administered face-to-face using mobile devices
 - User-based (rather than subscription-based) data allowing for disaggregation by urban-rural, gender, SEC, age, etc.
- Asian countries by LIRNEasia. Africa by Research ICT Africa. Latin America by DIRSI
- Funded by IDRC (Canada), SIDA (Sweden) & Ford Foundation (Nepal)
- Nepal partners: fieldwork - Nielsen Nepal; dissemination, back-check calls, translation checking - Center for Law and Technology and Internet Society

To date 18 countries (covering >30% global population); 38,005 face-to-face interviews; +/-3 margin of error; 22 countries by Dec 2018



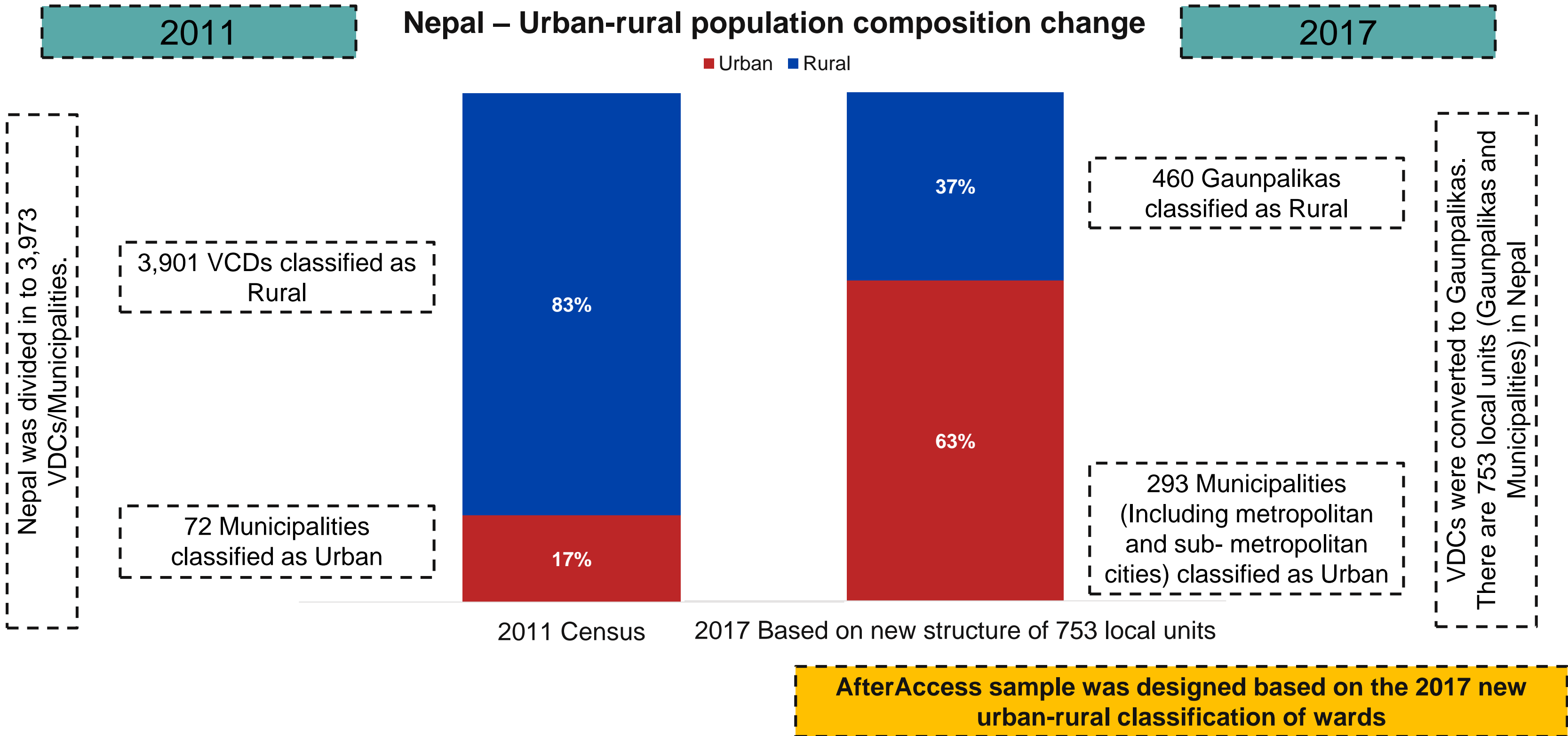
Sample sizes

Not shown in slides today:

- Sri Lanka, Senegal, Uganda & Ecuador
- Surveys just completed/surveys about to start/data being analyzed
- Watch www.afteraccess.net or www.lirneasia.net

Notes: Pakistan excludes AJK, FATA, Gilgit-Baltistan (~2% of population)
Sri Lanka data expected by December 2018

This survey in Nepal uses the recent re-classification of urban-rural by the CBS. Makes triangulation/comparison with past data difficult, even at national level

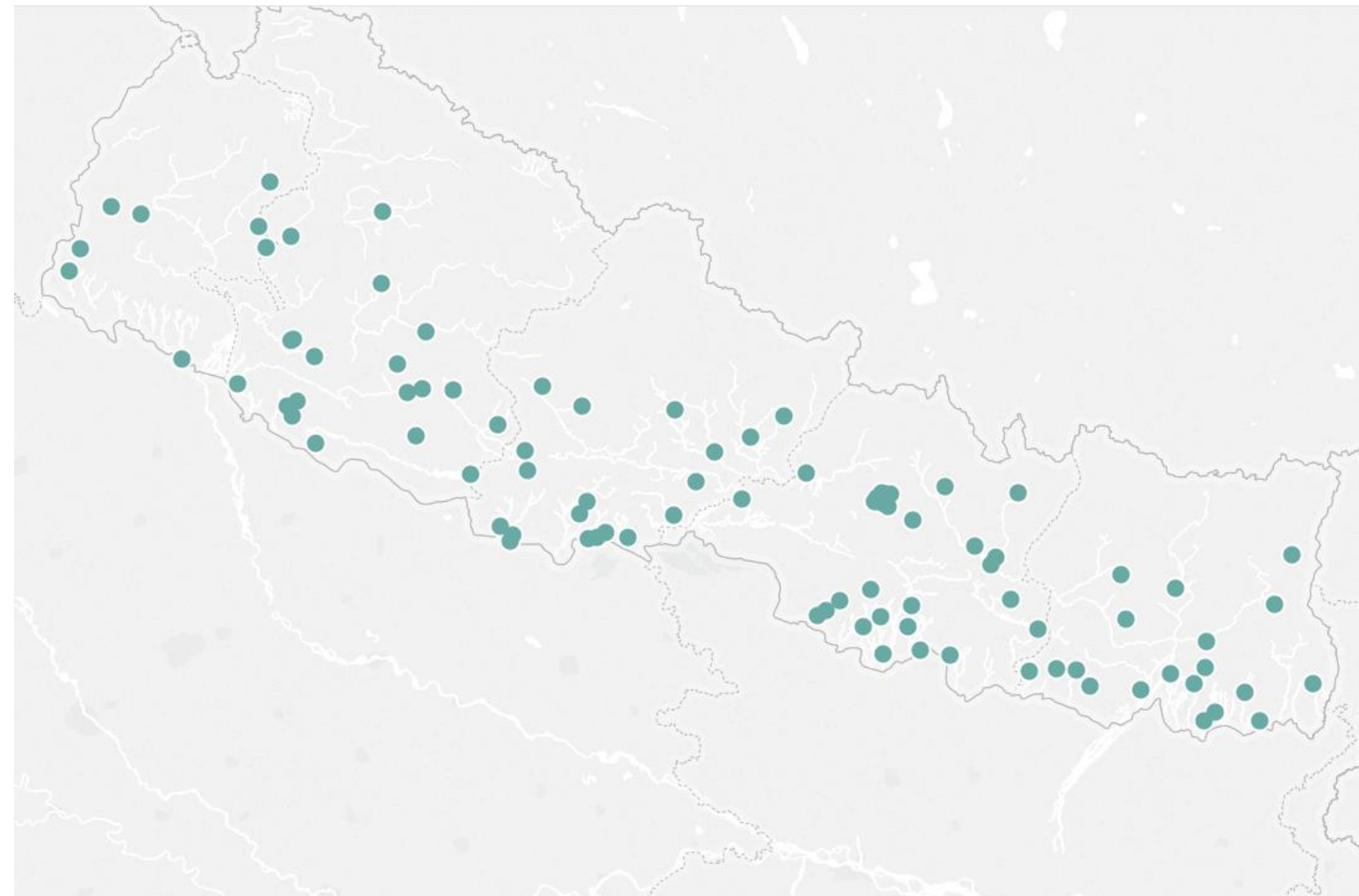


Source

<http://cbs.gov.np/image/data/Population/Population%20Monograph%20of%20Nepal%202014/Population%20Monograph%20of%20Nepal%202014%20Volume%20I%20FinalPrintReady1.pdf>

http://cbs.gov.np/image/data/2017/Population_Ward_Level_753_Local_Unit.pdf

Nationally representative survey among age 15-65 population and age 15-65 PWD population



Nepal main survey sample designed to be representative of 15-65 population at:

- National level
- Urban-rural level
- Men vs Women
- SEC (Socio-economic classification : a proxy for income)

With 95% Confidence Interval; +/-3.3 margin of error

2,000 individuals from 2,000 households for the main survey
400 PWDs from 400 households for the PWD survey
in **100 wards**

Nepal PWD survey sample designed to be representative of age 15-65 PWD population at national level

With 95% Confidence Interval; +/-9.8 margin of error

Sample GPS locations recorded by CAPI device at time of survey

Nepal weights (detailed)

Nepal

Household weight:

$$HH_W = DW \frac{1}{P_{WARD} * P_{SEG} * P_{HH}}$$

Individual weight:

$$IND_W = DW \frac{1}{P_{WARD} * P_{SEG} * P_{HH} * P_I}$$

Disabled individual weight:

$$DIS_IND_W = DW \frac{1}{P_{WARD} * P_{SEG} * P_{DIS_HH_SEG} * P_{DIS_HH} * P_{DIS_IND}}$$

Ward Selection Probability:

$$P_{WARD} = \frac{m}{HH_{STRATA}}$$

Segment selection Probability:

$$P_{SEG} = \frac{HH_{SEG}}{HH_{WARD}}$$

Household Selection Probability:

$$P_{HH} = \frac{n}{HH_{SEG}}$$

Probability of Household with Disabled individual in a selected segment:

$$P_{DIS_HH_SEG} = \frac{HH_{DIS}}{HH_{SEG}}$$

Household with Disabled individuals Selection Probability:

$$P_{DIS_HH} = \frac{q}{HH_{DIS}}$$

Individual selection Probability:

$$P_I = \frac{1}{HH_{m15+}}$$

Disabled Individual selection Probability:

$$P_{DIS_IND} = \frac{1}{HH_{m15+}}$$

When $HH_{WARD} \leq 250$, $HH_{WARD} = HH_{SEG}$. Thus, $P_{SEG}=1$. (i.e., if a ward has less than 250 households, it will be treated as an EA)

DW = design weight compensation for over-sampling of urban PSUs and under-sampling of rural PSUs;

HH_{WARD}= number of households in selected ward based on information of last census or updated listing by field team;

HH_{STRATA}=number of households in strata (urban, rural);

HH_{DIS}=number of households with disabled individuals in a segment;

HH_{m15+}=number of household members or visitors aged 15 -65 years;






m = target number of wards for each strata, (urban, rural);

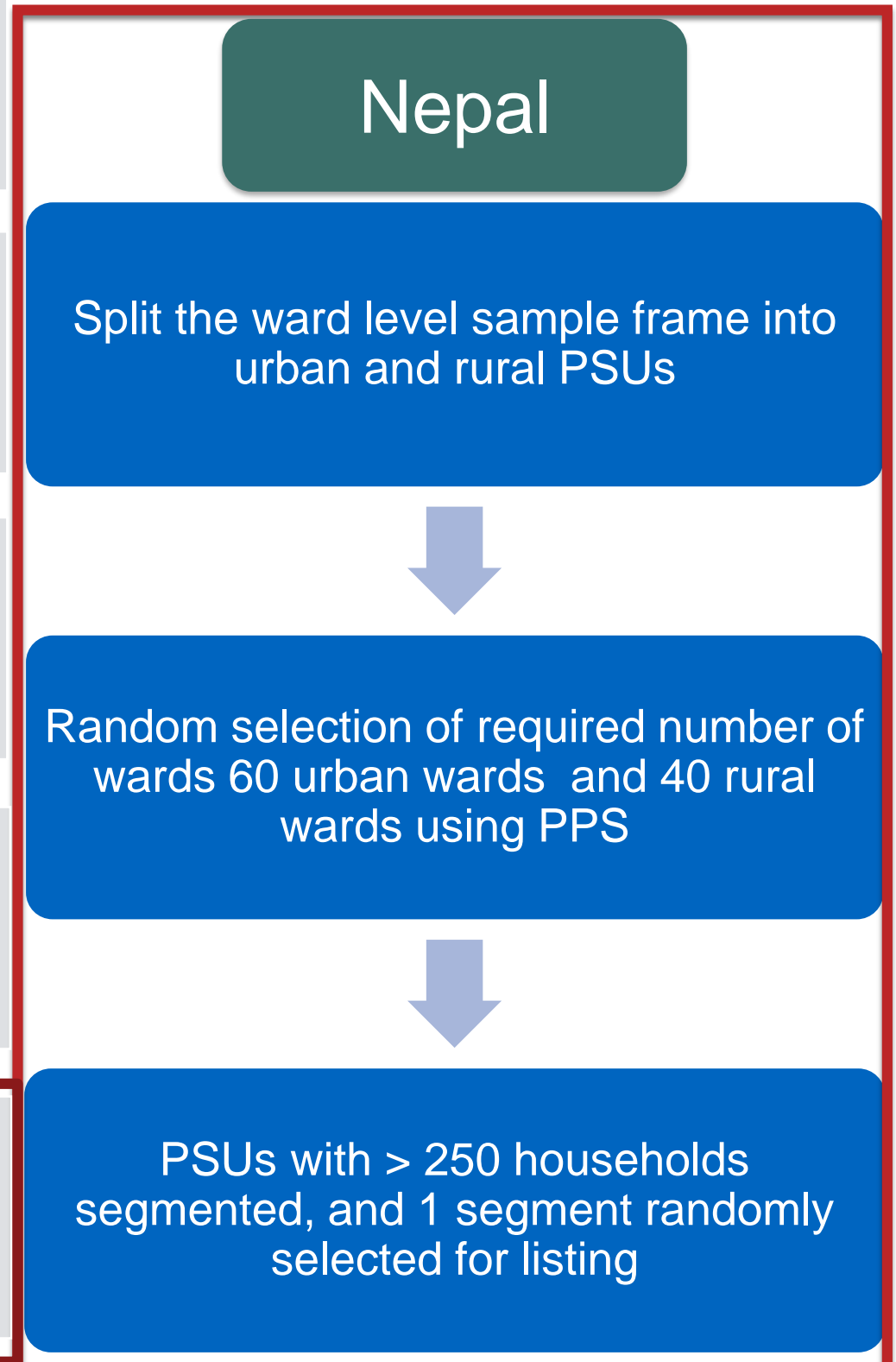
n = target number of households in a segment;

q = target number of households with disabled individuals in a segment

The target number of households in each PSU (ward/segment) for the national sample will be 20 and for the booster sample will be 4.

Sample designed to represent Nepal as a whole; random selection at every stage of sampling

| | |
|--|---|
|  | <p>250 Villages and Wards covering 19 States 108 Districts Fieldwork time period : October 5 – November 30 (2017)</p> |
|  | <p>100 Enumerator Areas of the 2017 National census 5 Provinces excluding FATA 28 Divisions Fieldwork time period : October 21 – December 26 (2017)</p> |
|  | <p>100 Villages and Wards 40 Zilas 92 Upazillas Fieldwork time period : October 8 – December 1 (2017)</p> |
|  | <p>100 Villages covering 20 Provinces 70 Districts Fieldwork time period : September 23 – October 12 (2017)</p> |
|  | <p>100 wards covering All Provinces 48 Districts Fieldwork time period : April 23 – June 18 (2018)</p> |



Stage 1:

Stratified random sampling of the primary sample units (PSUs) with probability proportionate to size (PPS) sampling

Obtaining PSU information (boundaries, households, etc.) from key informants

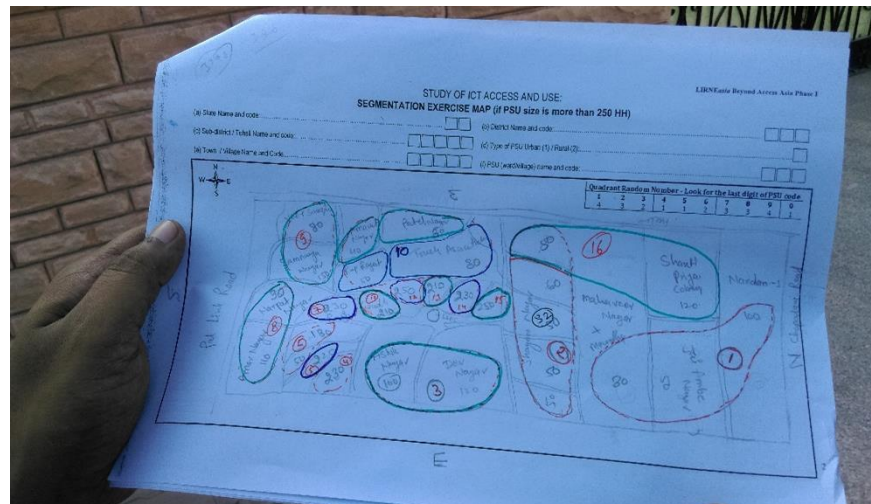


KI Interview in India

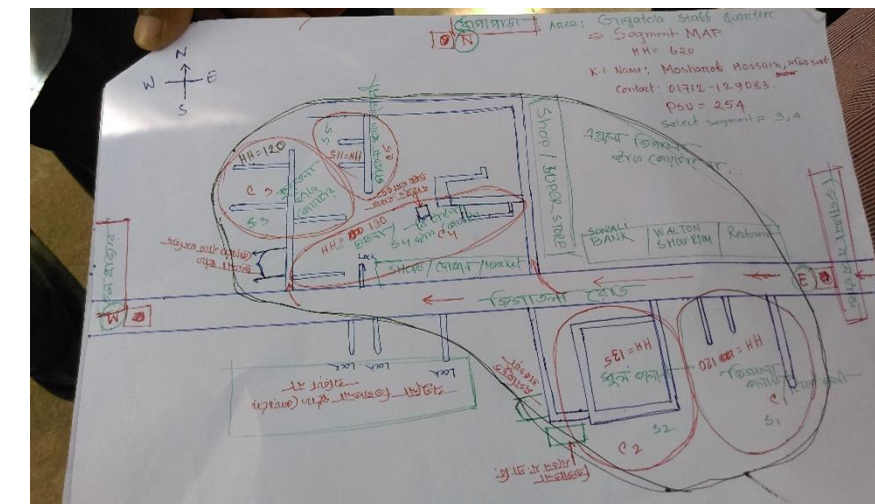


KI Interview in Cambodia

Mapping & segmentation



Segmentation Map - India



Segmentation Map - Bangladesh

Listing of households



Listing - Nepal



Listing - Pakistan

Stage 2:

Mapping and listing of selected PSUs

- Mapping of randomly selected village or ward with the help of the key informants

- Segmentation of wards and villages where the number of households exceeding 250

- List of structures of the entire segment identifying the eligible households
- In **Nepal**; all households with disabled people were identified during the listing

Information collected during the listing stage

LIRNEasia Beyond Access Asia Phase I

STUDY OF ICT ACCESS AND USE: LISTING FORMAT

(a) State Name and code: (b) District Name and code:

(c) Sub-district / Tehsil Name and code: (d) Type of PSU Urban (1) / Rural (2):

(e) Block / Town Name and Code: (f) PSU (ward/village) name and code:

| COL 1 | COL 2 | COL 3 | COL 4 | COL 5 | COL 6 | COL 7 | COL 8 | COL 9 | COL 10 | COL 11 |
|---|------------------|---------------------------------------|----------|--|---------------------|-------------------------------|--|--|-------------------------------|--|
| Segment Number Put "0" if no segment | Structure Number | Address (Description of structure) | Landmark | Is residential? Yes....1 No....2 | Serial Number of HH | Name of the head of household | Any person of age 15 to 65 years Y.....1 N.....2 | If "yes" in "COL 8" ask Total Number person of age 15 to 65 years | Total number of members in HH | Contact Result 1. Success 2. Locked 3. Refused 4. Migrated 5. Other |
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- GPS coordinates also captured on CAPI device (mobile/tab) for every structure listed during listing
- households with disabled people were identified during the listing

Random selection of households conducted systematic random sampling using the household lists collected during the listing

Stage 3:

Random selection of listed households

| Surfj | Surveyor | A6 | A7 | HNO | House status | Address | HH Name | THH | Mem | Latitude | Longitude | Selected House No. | |
|-------|----------|-----------|-----------------------|-----|--------------|---------|---------------------------|--|-----------------|----------|------------|--------------------|----|
| 17 | 5411883 | Shabana B | FEROZABAD (440110404) | A | B | C | Successful / Listing hour | Mahmoodabad - 5 - H - No - 1336/5 - 36 | Muhammad Khan | 8 | 24.8572700 | 67.0817800 | |
| 18 | 5411883 | Shabana B | FEROZABAD (440110404) | A | B | 7 | Successful / Listing hour | Mahmoodabad - 5 - H - No - 1336/5 - 36 | Imran | 3 | 24.8571700 | 67.0816400 | 20 |
| 19 | 5411883 | Shabana B | FEROZABAD (440110404) | A | B | 6 | Successful / Listing hour | Mahmoodabad - 5 - H - No - 1336/5 - 36 | Shahzad | 2 | 24.8571700 | 67.0816700 | |
| 20 | 5411883 | Shabana B | FEROZABAD (440110404) | A | B | 6 | Successful / Listing hour | Mahmoodabad - 5 - H - No - 1336/5 - 36 | Muhammad Zubair | 7 | 24.8571433 | 67.0814200 | |
| 21 | 5411883 | Shabana B | FEROZABAD (440110404) | A | B | 7 | Successful / Listing hour | Mahmoodabad - 5 - H - No - 1336/5 - 36 | Javed Qureshi | 7 | 24.8571817 | 67.0816200 | |
| 22 | 5411883 | Shabana B | FEROZABAD (440110404) | A | B | 6 | Successful / Listing hour | Mahmoodabad - 5 - H - No - 1336/5 - 36 | Gufran Khan | 7 | 24.8571800 | 67.0816200 | |
| 23 | 5411883 | Shabana B | FEROZABAD (440110404) | A | B | 7 | Successful / Listing hour | Mahmoodabad - 5 - H - No - 1336/5 - 36 | Krishan | 3 | 24.8572043 | 67.0815183 | |
| 24 | 5411883 | Shabana B | FEROZABAD (440110404) | A | B | 6 | Successful / Listing hour | Mahmoodabad - 5 - H - No - 1336/5 - 36 | Farooq Din | 4 | 24.8570983 | 67.0814600 | |
| 25 | 5411883 | Shabana B | FEROZABAD (440110404) | A | B | 6 | Successful / Listing hour | Mahmoodabad - 5 - H - No - 1336/5 - 36 | Yasir Ali | 4 | 24.8570983 | 67.0815000 | |
| 26 | 5411883 | Shabana B | FEROZABAD (440110404) | A | B | 6 | Successful / Listing hour | Mahmoodabad - 5 - H - No - 1336/5 - 36 | Fazal Dad | 7 | 24.8569433 | 67.0817333 | |
| 27 | 5411883 | Shabana B | FEROZABAD (440110404) | A | B | 6 | Successful / Listing hour | Mahmoodabad - 5 - H - No - 1336/5 - 36 | Amjad Ali | 7 | 24.8572000 | 67.0816100 | |
| 28 | 5411883 | Shabana B | FEROZABAD (440110404) | A | B | 6 | Successful / Listing hour | Mahmoodabad - 5 - H - No - 1336/5 - 36 | Dilbar Khan | 21 | 24.8567347 | 67.0814483 | |
| 29 | 5411883 | Shabana B | FEROZABAD (440110404) | A | B | 6 | Successful / Listing hour | Mahmoodabad - 5 - H - No - 1336/5 - 36 | Muhammad Tufail | 4 | 24.8539000 | 67.0818333 | |
| 30 | 5411883 | Shabana B | FEROZABAD (440110404) | A | B | 6 | Successful / Listing hour | Mahmoodabad - 5 - H - No - 1336/5 - 36 | Muhammad Ali | 4 | 24.8563833 | 67.0828733 | |

Random HH selection in PK

| Surfj | Surveyor | A6 | A7 | HNO | House status | Address | HH Name | THH | Mem | Latitude | Longitude | Selected House No. | |
|-------|----------|-----------|-----------------------|-----|--------------|---------|---------------------------|--|-----------------|----------|------------|--------------------|----|
| 1 | 5411883 | Shabana B | FEROZABAD (440110404) | A | B | 6 | Successful / Listing hour | Mahmoodabad - 5 - H - No - 1336/5 - 36 | Muhammad Khan | 8 | 24.8572700 | 67.0817800 | |
| 2 | 5411883 | Shabana B | FEROZABAD (440110404) | A | B | 7 | Successful / Listing hour | Mahmoodabad - 5 - H - No - 1336/5 - 36 | Imran | 3 | 24.8571700 | 67.0816400 | 20 |
| 3 | 5411883 | Shabana B | FEROZABAD (440110404) | A | B | 6 | Successful / Listing hour | Mahmoodabad - 5 - H - No - 1336/5 - 36 | Shahzad | 2 | 24.8571700 | 67.0816700 | |
| 4 | 5411883 | Shabana B | FEROZABAD (440110404) | A | B | 6 | Successful / Listing hour | Mahmoodabad - 5 - H - No - 1336/5 - 36 | Muhammad Zubair | 7 | 24.8571433 | 67.0814200 | |
| 5 | 5411883 | Shabana B | FEROZABAD (440110404) | A | B | 7 | Successful / Listing hour | Mahmoodabad - 5 - H - No - 1336/5 - 36 | Javed Qureshi | 7 | 24.8571817 | 67.0816200 | |
| 6 | 5411883 | Shabana B | FEROZABAD (440110404) | A | B | 6 | Successful / Listing hour | Mahmoodabad - 5 - H - No - 1336/5 - 36 | Gufran Khan | 7 | 24.8571800 | 67.0816200 | |
| 7 | 5411883 | Shabana B | FEROZABAD (440110404) | A | B | 7 | Successful / Listing hour | Mahmoodabad - 5 - H - No - 1336/5 - 36 | Krishan | 3 | 24.8572043 | 67.0815183 | |
| 8 | 5411883 | Shabana B | FEROZABAD (440110404) | A | B | 6 | Successful / Listing hour | Mahmoodabad - 5 - H - No - 1336/5 - 36 | Farooq Din | 4 | 24.8570983 | 67.0814600 | |
| 9 | 5411883 | Shabana B | FEROZABAD (440110404) | A | B | 6 | Successful / Listing hour | Mahmoodabad - 5 - H - No - 1336/5 - 36 | Yasir Ali | 4 | 24.8570983 | 67.0815000 | |
| 10 | 5411883 | Shabana B | FEROZABAD (440110404) | A | B | 6 | Successful / Listing hour | Mahmoodabad - 5 - H - No - 1336/5 - 36 | Fazal Dad | 7 | 24.8569433 | 67.0817333 | |
| 11 | 5411883 | Shabana B | FEROZABAD (440110404) | A | B | 6 | Successful / Listing hour | Mahmoodabad - 5 - H - No - 1336/5 - 36 | Amjad Ali | 7 | 24.8572000 | 67.0816100 | |
| 12 | 5411883 | Shabana B | FEROZABAD (440110404) | A | B | 6 | Successful / Listing hour | Mahmoodabad - 5 - H - No - 1336/5 - 36 | Dilbar Khan | 21 | 24.8567347 | 67.0814483 | |
| 13 | 5411883 | Shabana B | FEROZABAD (440110404) | A | B | 6 | Successful / Listing hour | Mahmoodabad - 5 - H - No - 1336/5 - 36 | Muhammad Tufail | 4 | 24.8539000 | 67.0818333 | |
| 14 | 5411883 | Shabana B | FEROZABAD (440110404) | A | B | 6 | Successful / Listing hour | Mahmoodabad - 5 - H - No - 1336/5 - 36 | Muhammad Ali | 4 | 24.8563833 | 67.0828733 | |

Random HH selection in KH

Interviews conducted on mobile devices

Stage 4:

Household interview (with household representative) and individual interview (with randomly selected individual after listing eligible members in household roster)



- Random selection of 20-25 households for the main survey
- Random selection of 4 households for the PWD survey

- Listing all the household members in the household roster
- Randomly selecting one member from age 15-65 from the list for the main survey (from 20 households)
- Randomly selecting one member from age 15-65 from the list for the PWD survey (from 4 households)

Apples vs oranges: A note on comparison of AfterAccess data with supply-side

| Supply side data as reported via operators/NTA | Demand side (household and individual survey we report) | Implication |
|---|--|--|
| <p>Counts active SIMs</p> <p>Includes individual AND corporate users</p> <p>Includes SIMs inside devices (e.g. POS)</p> | <p>Counts USERS with one or more SIM cards</p> <p>Does not count corporate connections</p> <p>Does not count SIMs in other devices</p> | <p>Demand side data more accurate reflection of individuals and households who have access (Counts multi-SIM owners as ONE user)</p> <p>Avoids inaccuracies with problematic SIM registrations</p> <p>Demand side result WILL be lower</p> |
| <p>Includes SIMs used by all users, without age restriction</p> | <p>Our survey only targeted those aged 15 -65 (66% of the population in Nepal)</p> | <p>Below 14 or Over 66 years persons are not counted.</p> <p>Demand side estimate WILL be lower.</p> |

AfterAccess % of PWD population is aligned with the Nepal 2011 census

PWD population % from 2011 Nepal census

513,321 persons with disabilities

1.94% of total population

- Consist of all age groups
- PWD population numbers for the age 15-65 group is not available to the public

PWD population % from AfterAccess survey

291,481 persons with disabilities

1.6% of aged 15-65 population

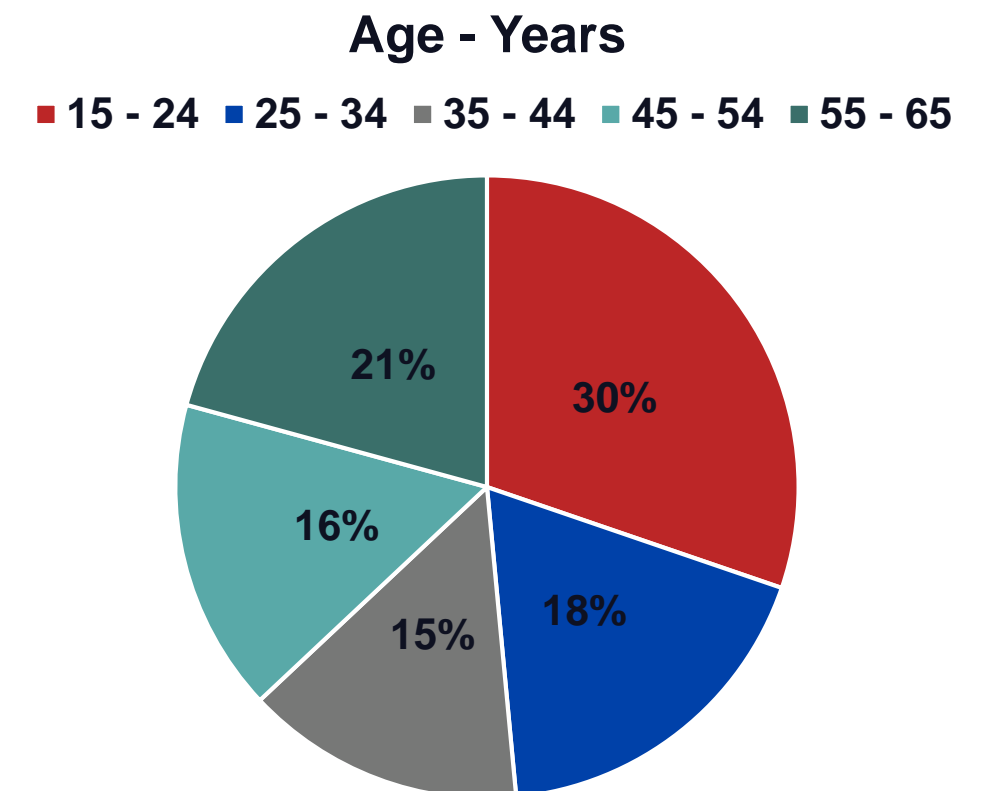
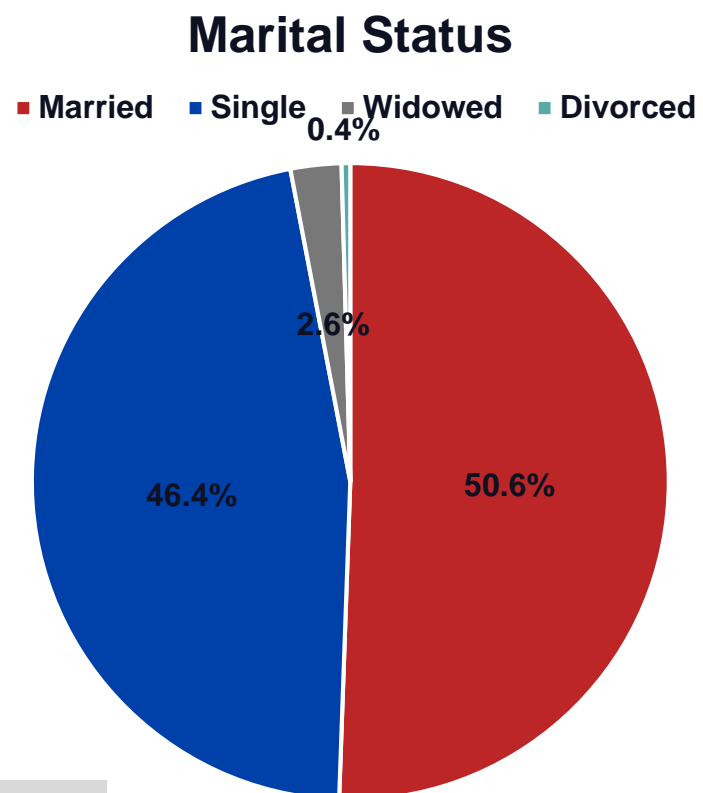
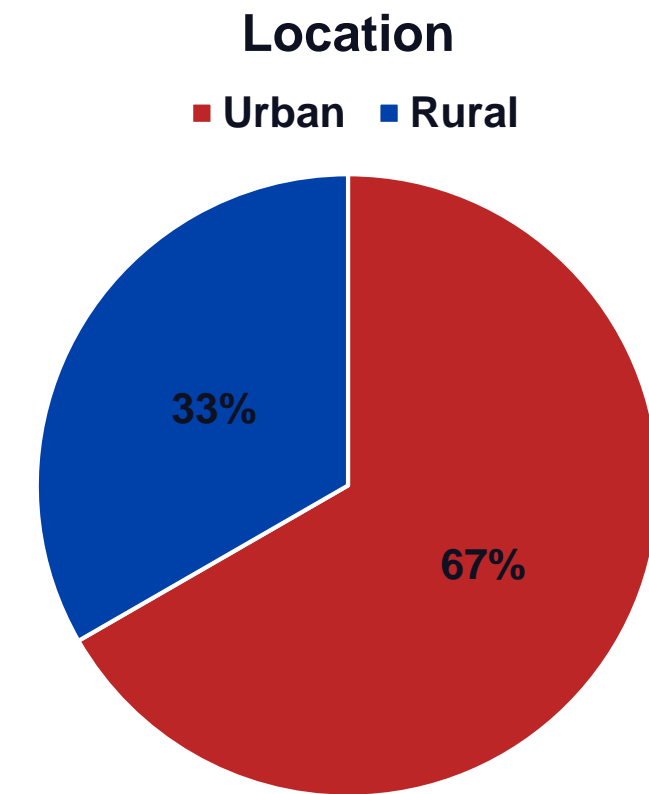
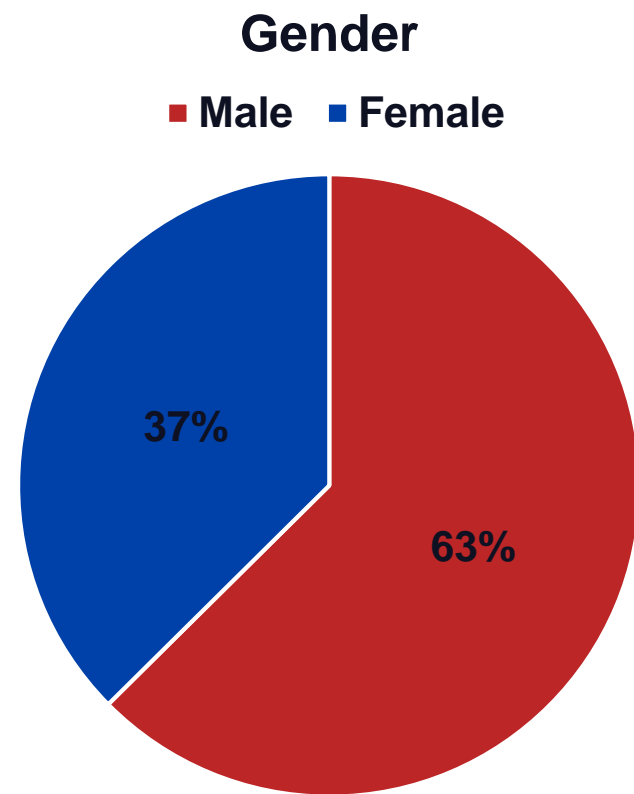
- AfterAccess survey only consist with age 15-65 population*

* As per the 2011 census aged 15-65 population in Nepal is 61%.

Persons with disabilities (PWDs) in Nepal

Traits of the selected sample

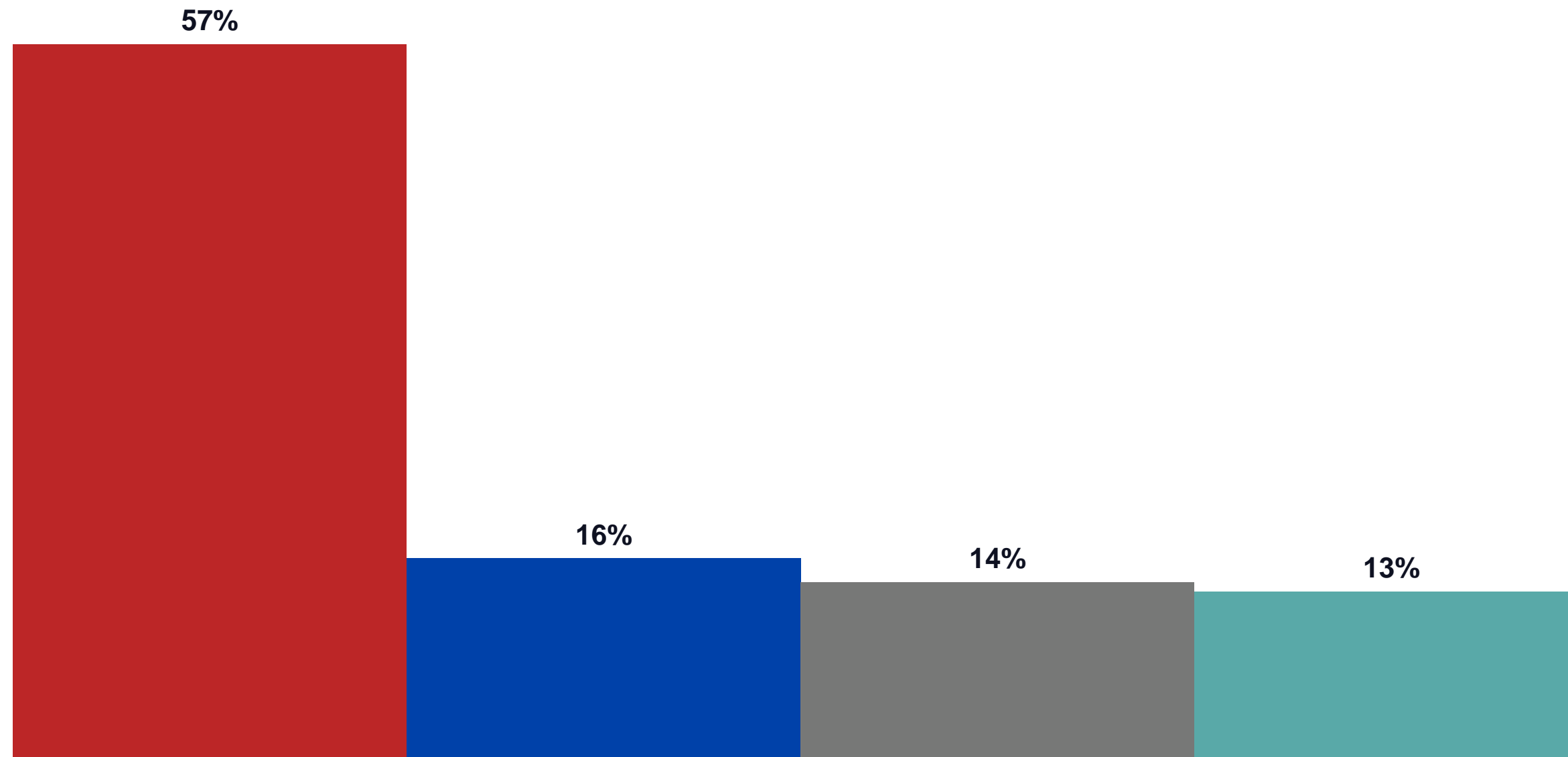
Demography of the Respondents (persons with disabilities – PWD)



Most respondents were interviewed directly

Enumerator observations on the respondents (%of aged 15-65 PWD population)

- Interview directly with the person with disability
- Someone else is reporting together with the person with disability
- Another person (Interpreter) is reporting for the person with disability (language)
- Someone else [proxy] is reporting on behalf of the person with disability

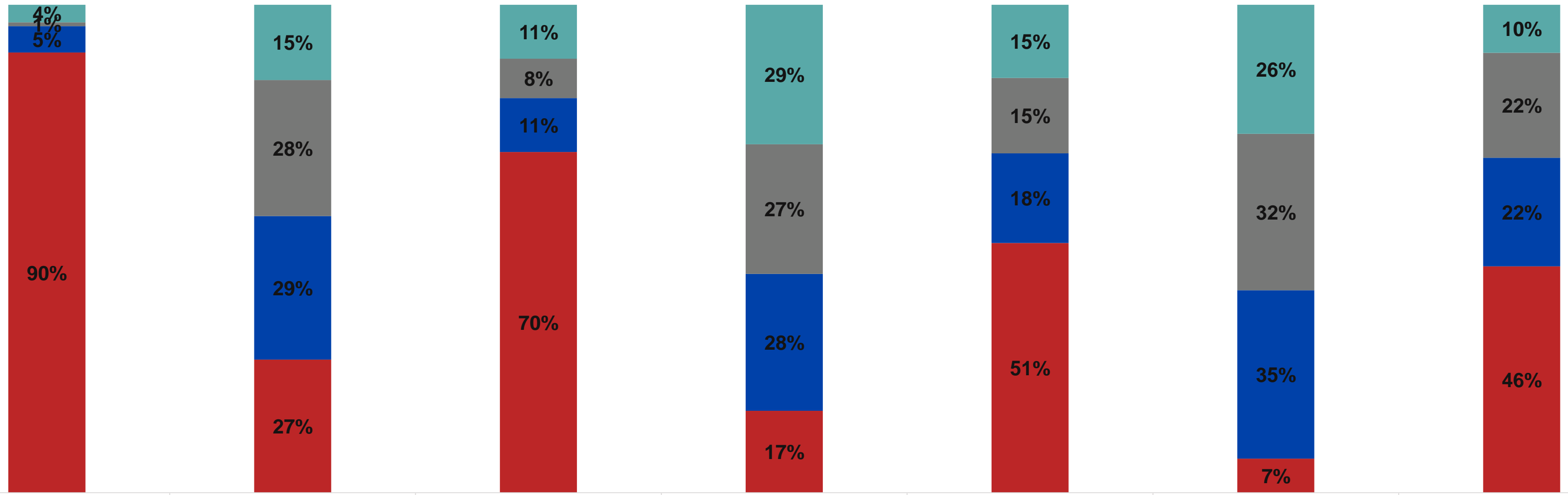


Q: Is this face to face interview with the person with disability interview directly with the person with disability/ someone else is reporting together with the person with disability/ another person (interpreter) is reporting for the person with disability (language)/ someone les [proxy] is reporting on behalf of the person with disability [mark by observation) ?

Respondents with difficulty remembering and communicating needed assistance

Data enumerator observations and the disability type of the respondents (%of aged 15-65 PWD population)

- Someone else [proxy] is reporting on behalf of the person with disability
- Someone else is reporting together with the person with disability
- Another person (Interpreter) is reporting for the person with disability (language)
- Interview directly with the person with disability



Difficulty seeing

Difficulty hearing

Difficulty walking or climbing steps

Difficulty remembering or concentrating

Difficulty with self-care

Difficulty of communicating using the usual language

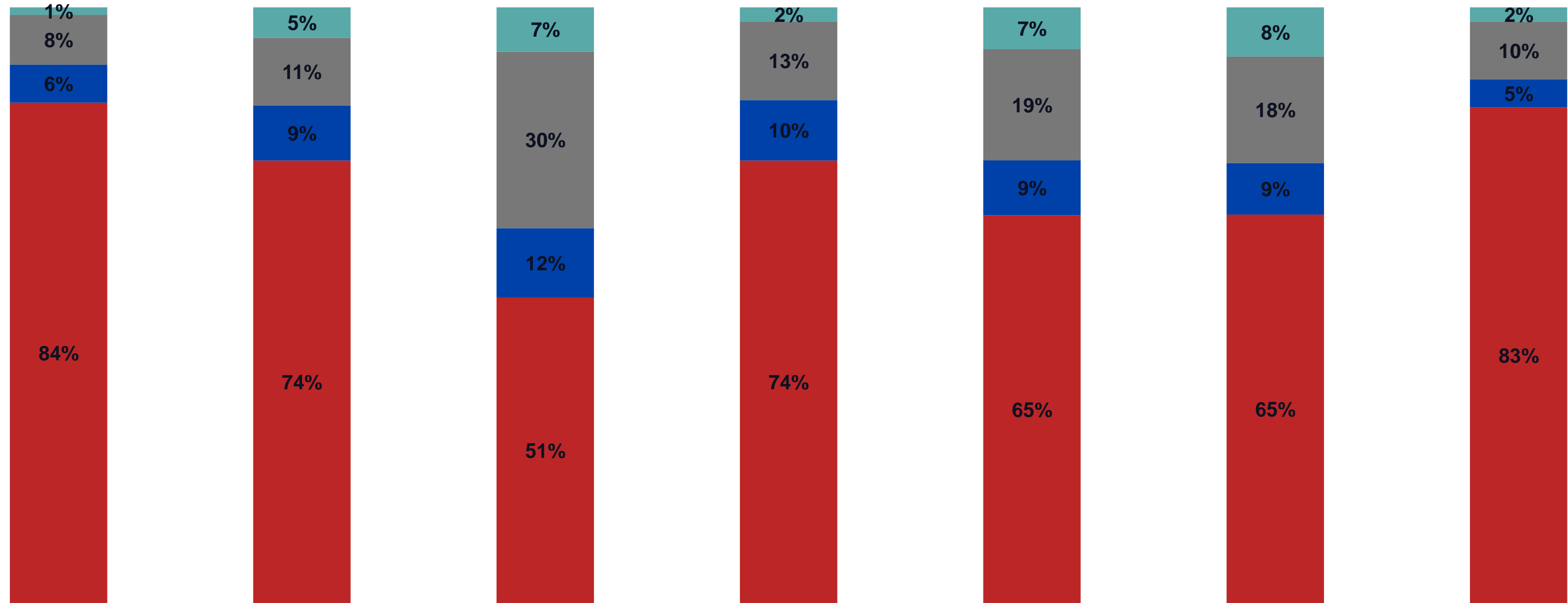
Permanent difficulty in carrying out activities with hands

Q: Do you have difficulty seeing/hearing/walking or climbing steps/remembering or concentrating/with self-care/in communicating using usual language/ in carrying out activities?

Use of, and demand for, assistive devices

Difficulties of communicating, moving & self-care significant among respondents

Type of disabilities and level of difficulties of the respondents (% of aged 15-65 PWD population)



■ No difficulty ■ Some difficulty ■ A lot of difficulty ■ Can not do at all

Q: Do you have difficulty seeing/hearing/walking or climbing steps/remembering or concentrating/self-care/communicating/carrying out activities?

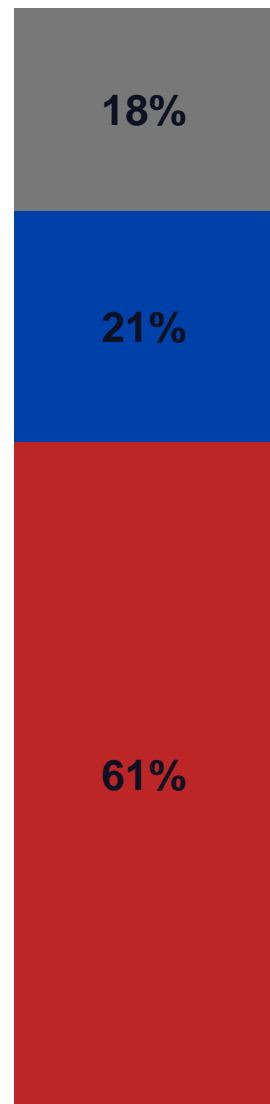
All respondents 400

Mobility assistive devices/technologies most common

% of aged 15-65 PWD population

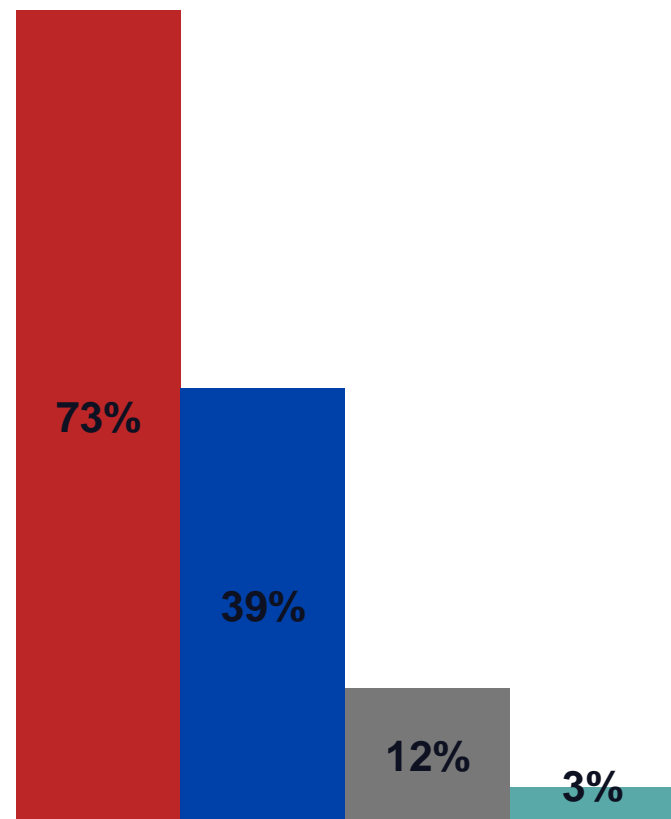
Ability to do day today work

- Partially
- Competetly
- Not at all



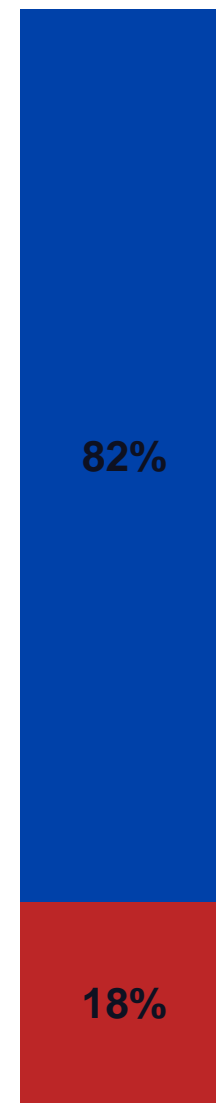
Means use to communicate

- Verbally
- Written messages
- Sign language
- Other



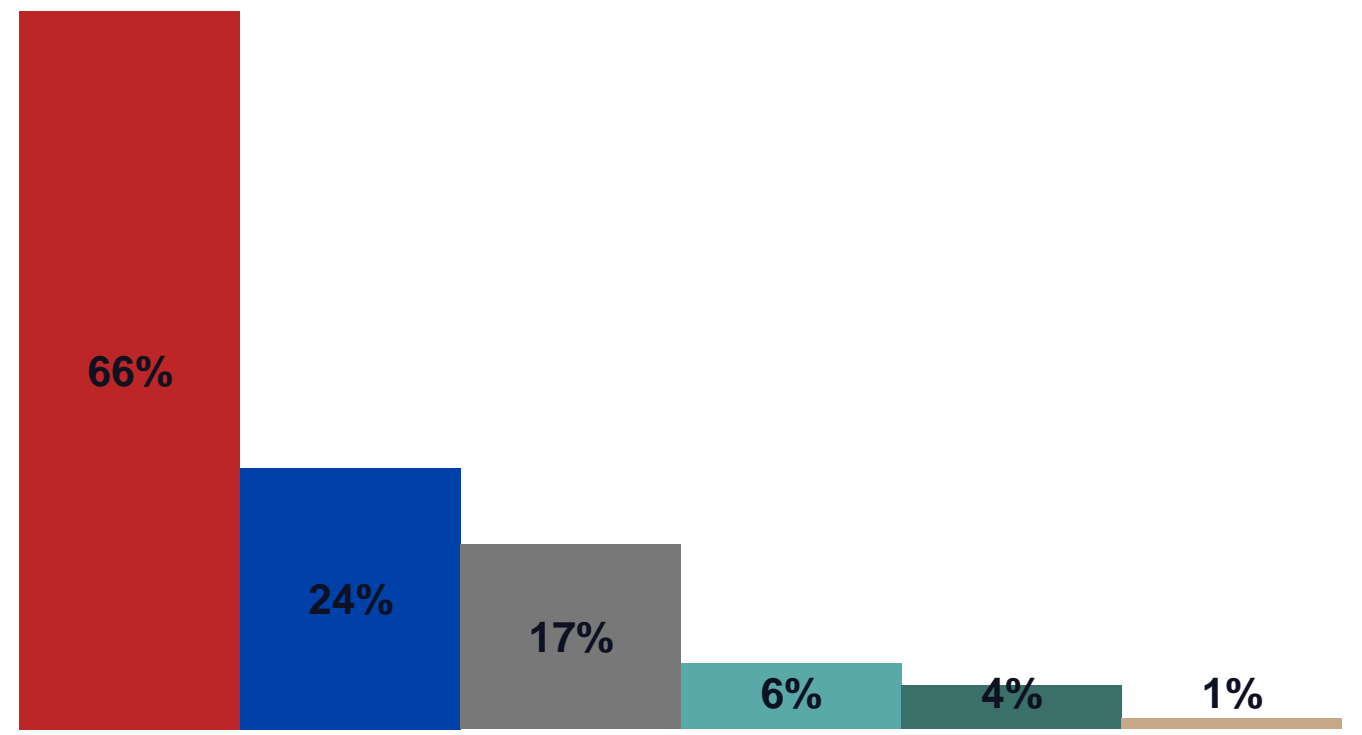
Use of any device

- Yes
- No



Types of the devices/technologies use (% of the PWDs who use assistive devices/technologies)

- Move around
- Achieve or maintain positions
- Other
- Communication devices
- Computer access devices
- Adaptive toys and games



Q: To what extent are you able to manage your day today activities independently?

Q: What are the means you use to communicate?

Q: Do you use any device or technology to do your activities?

Q: What are the devices/technologies you use?

All respondents 400

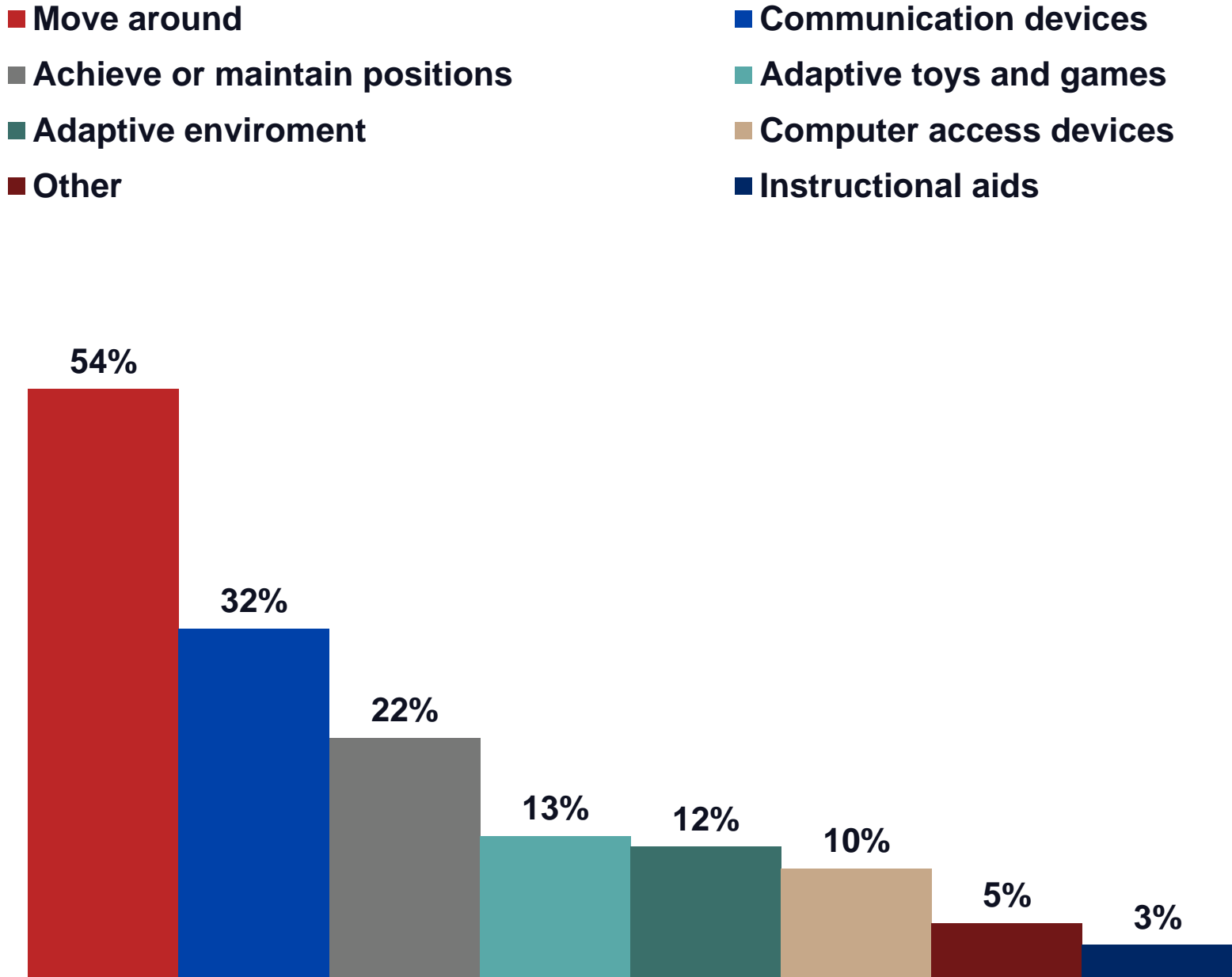
All respondents 400

All respondents 400

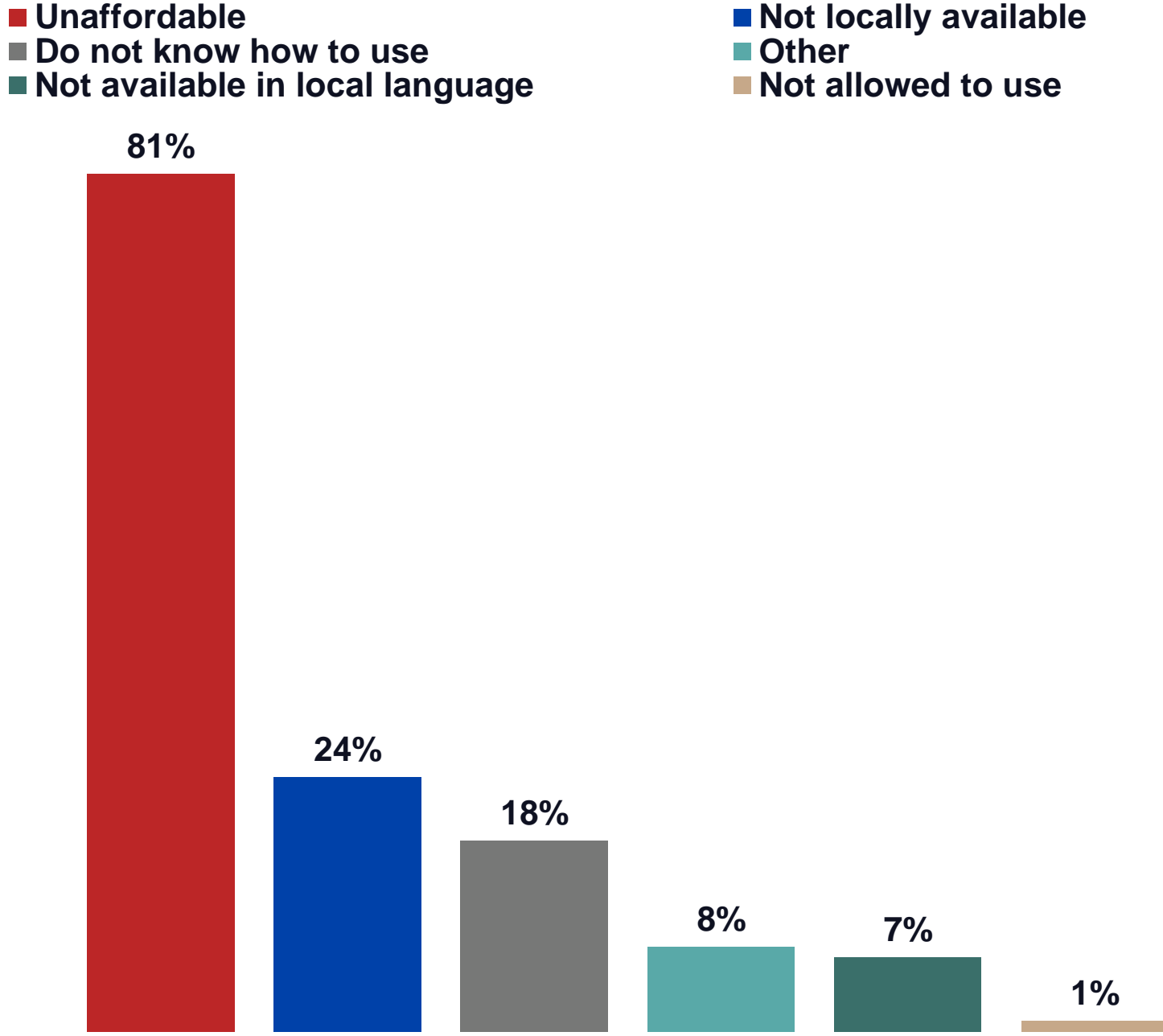
Devices/technology users 84

Mobility-assistive devices are desired; Main reason for lack is affordability

Assistive devices/technologies that would like to have (% of age 15-65 PWD population who would like to have devices/technologies)



Reason for not having assistive devices/technologies (% of age 15-65 PWD population who would like to have devices/technologies)



Q: What devices and technologies do you need, but do not have?

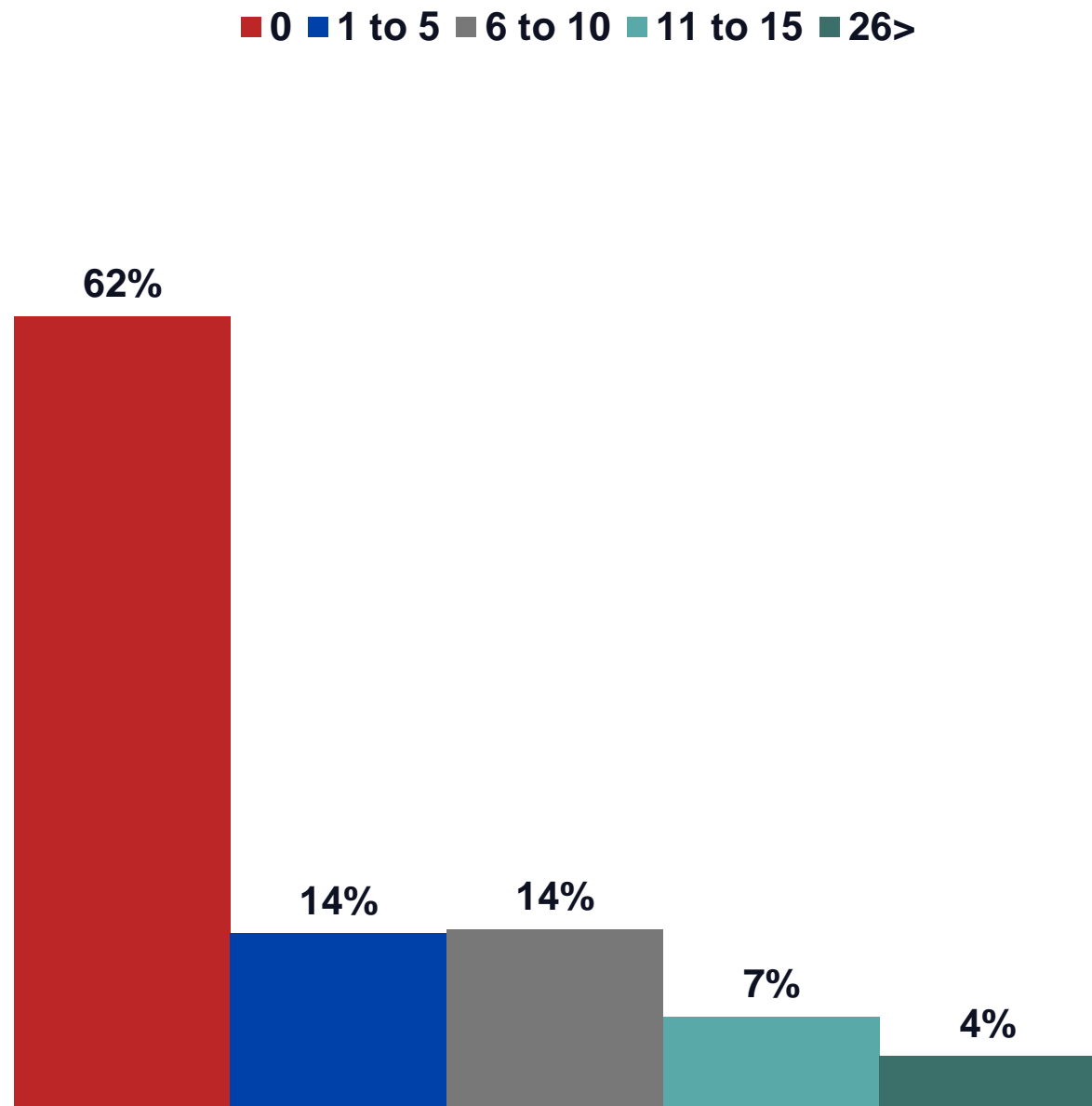
Number of respondents who required assistive devices/technologies 132

Q: What is the reason for not having the device/technology?

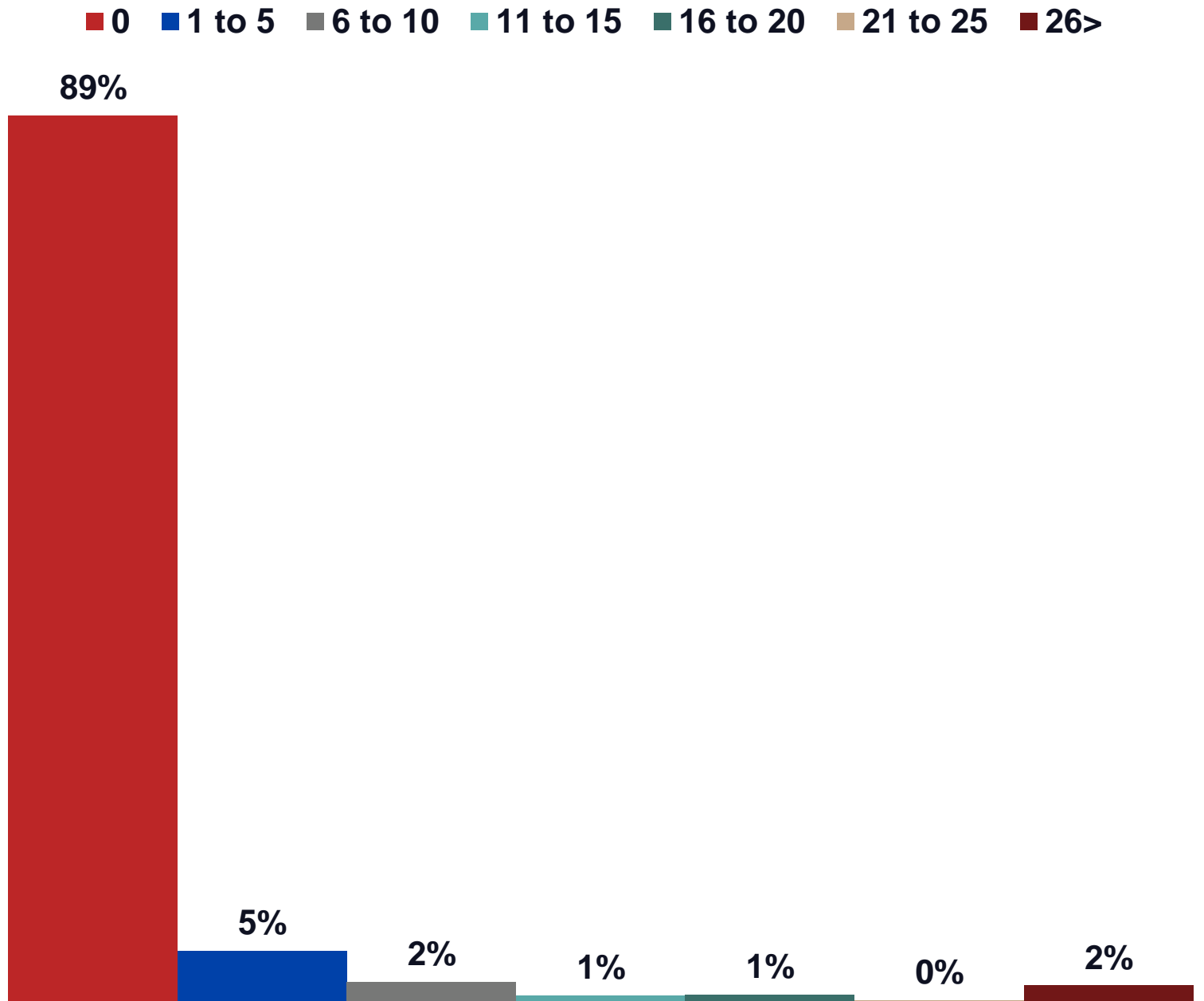
Number of respondents who required assistive devices/technologies 132

Less impact due to device and supportive service failures since the usage is low

Days in the last month been unable to do activities due to device failures (% of aged 15-65 PWD population who use devices/technologies)



Days in the last month been unable to do activities due to failures of supportive services such as internet and electricity (% of aged 15-65 PWD population)



Q: How many days during the past month have you been unable to do your day to day activities due to failures in devices?

Device/technology users 84

Q: How many days during the past month have you been unable to do your day to day activities due to failures in supportive environment such as internet and electricity?

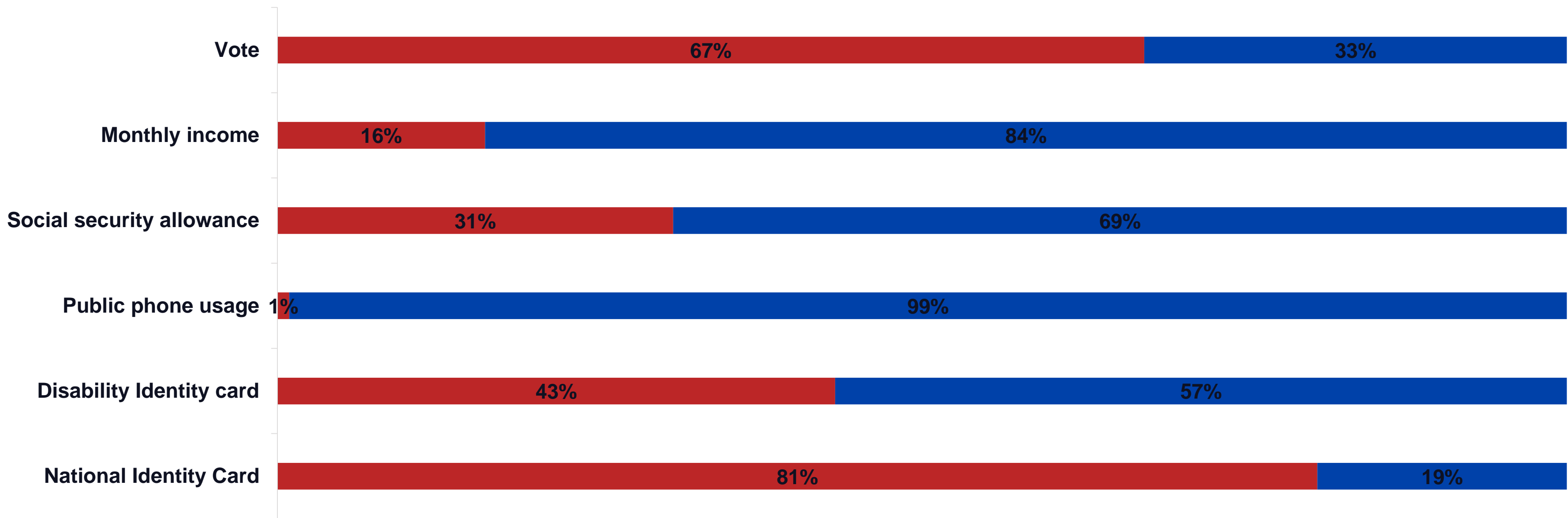
All respondents 400

SOCIAL AND ECONOMIC INCLUSION

Social and economic inclusion yet to be achieved

Social and economic inclusion indicators (% of aged 15-65 PWD population)

■ Yes ■ No



Q 01: Do you vote?

Q 02: Do you have a monthly income?

Q 03: Do you get social security allowance?

Q 04: Have you used a public phone in the past 3 months?

Q 05: Do you have a disability identity card?

Q 06: Do you have a national identity card?

All respondents

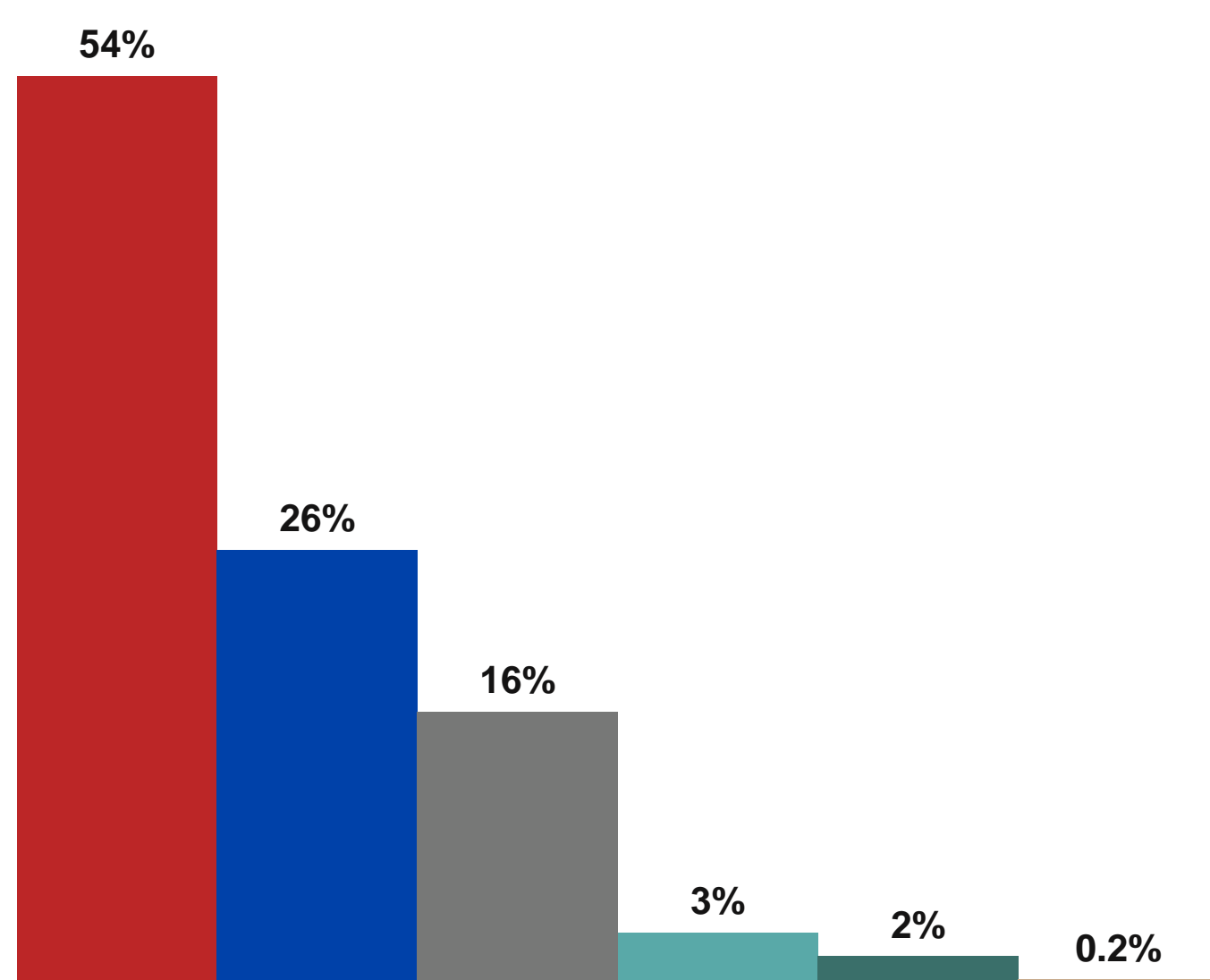
400

25

The majority lacks formal education

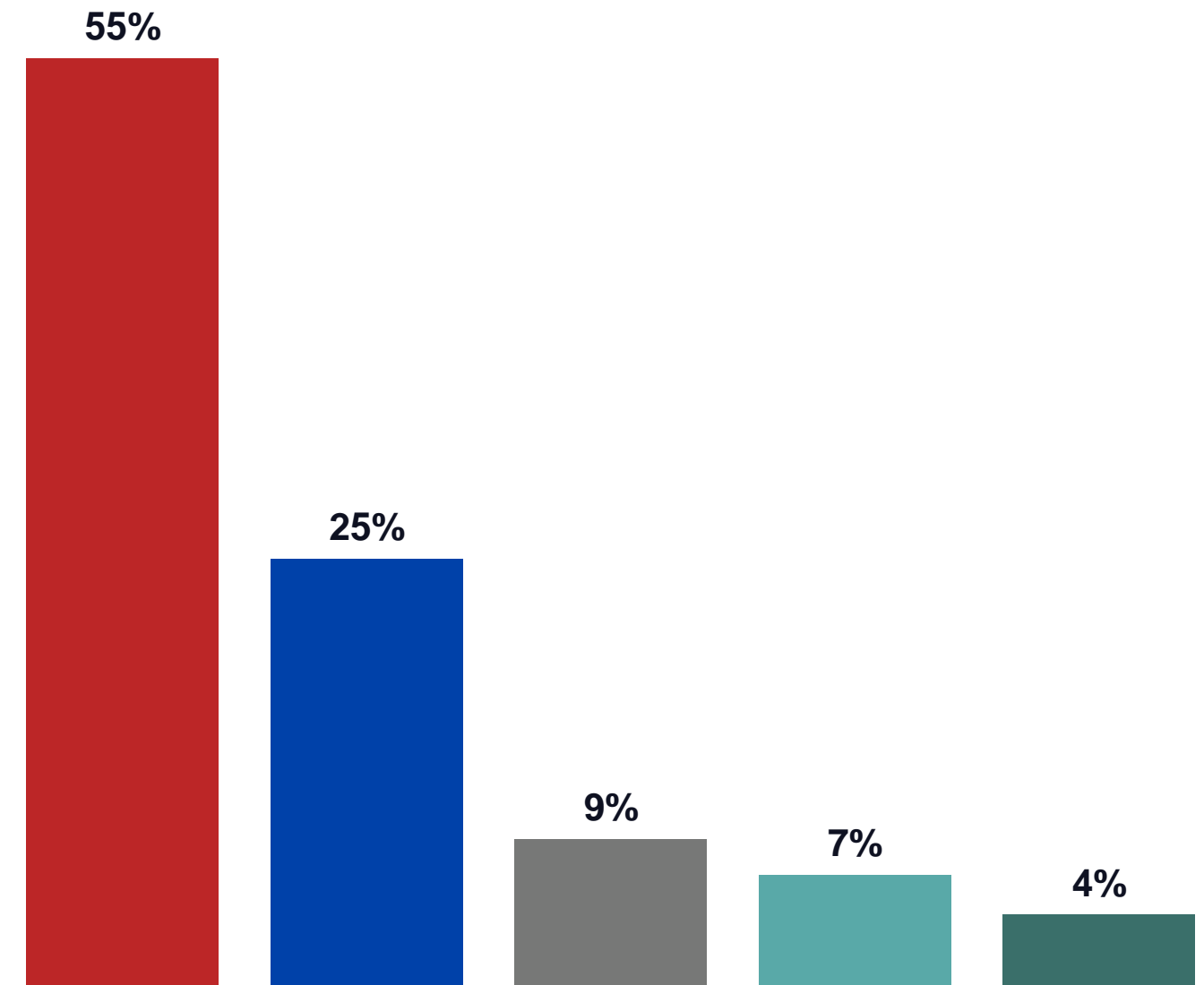
Education Qualification (% of aged 15-65 PWD population)

- None
- Primary
- Secondary
- Bachelors
- Tertiary: Diploma/Certificate
- Tertiary: Masters



Reasons for never attending school (% of aged 15-65 Non-school PWD population)

- Due to disability
- Not enough money
- Do not know
- Lack of interest
- Other



Q: What is your highest level of schooling completed?

All respondents 400

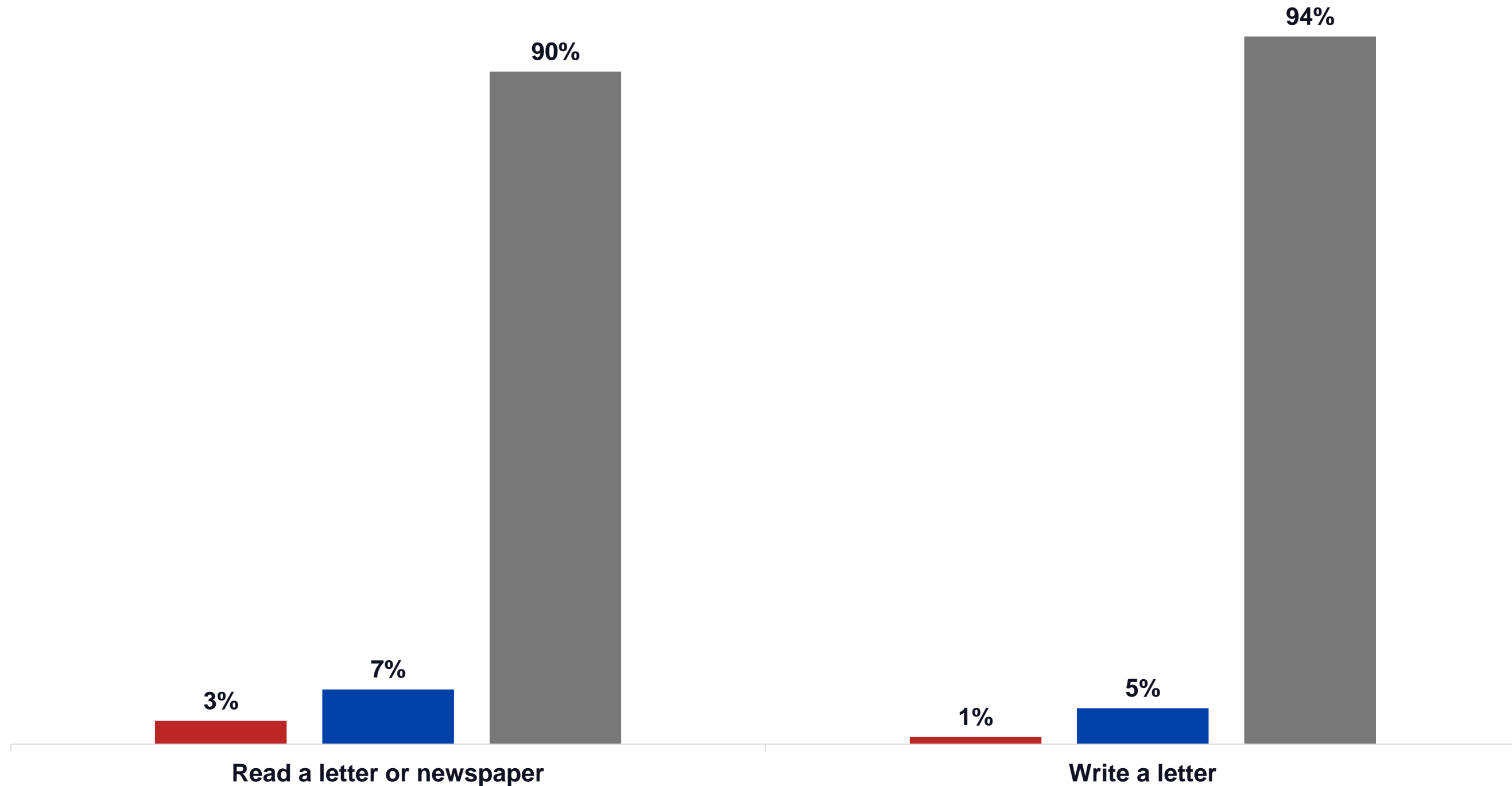
Q: What was the reason that you never attended school?

26 Non-school respondents 206

Limited opportunities to learn how to read or write for those who did not attend school

Ability to read and write (% of aged 15-65 non- school PWD population)

■ Easily ■ With difficulty ■ Not at all



Q 01: If you are non-school can you read a letter or newspaper?

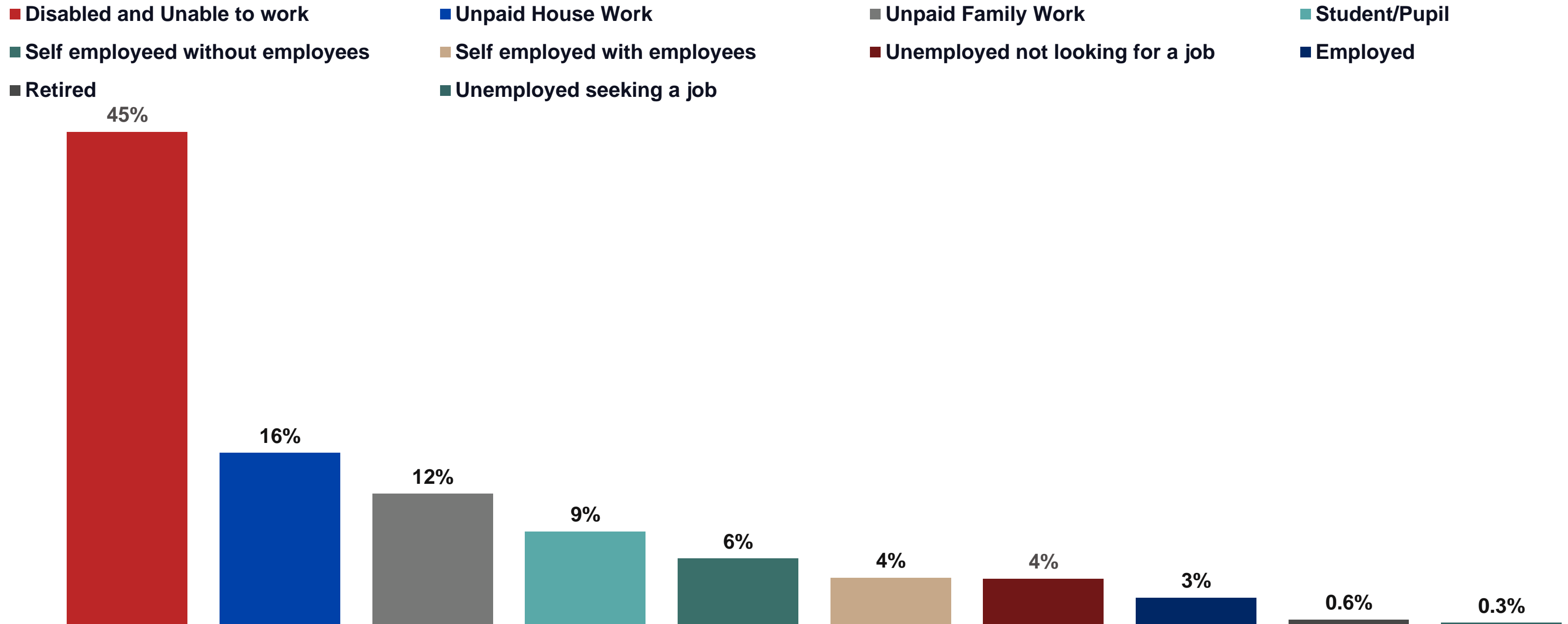
Q 02: If you are non-school can you write a letter?

Non-school respondents 206

Non-school respondents 206

Unpaid house/family work as main activity

Main activity during the last 6 months (% of aged 15-65 PWD population)



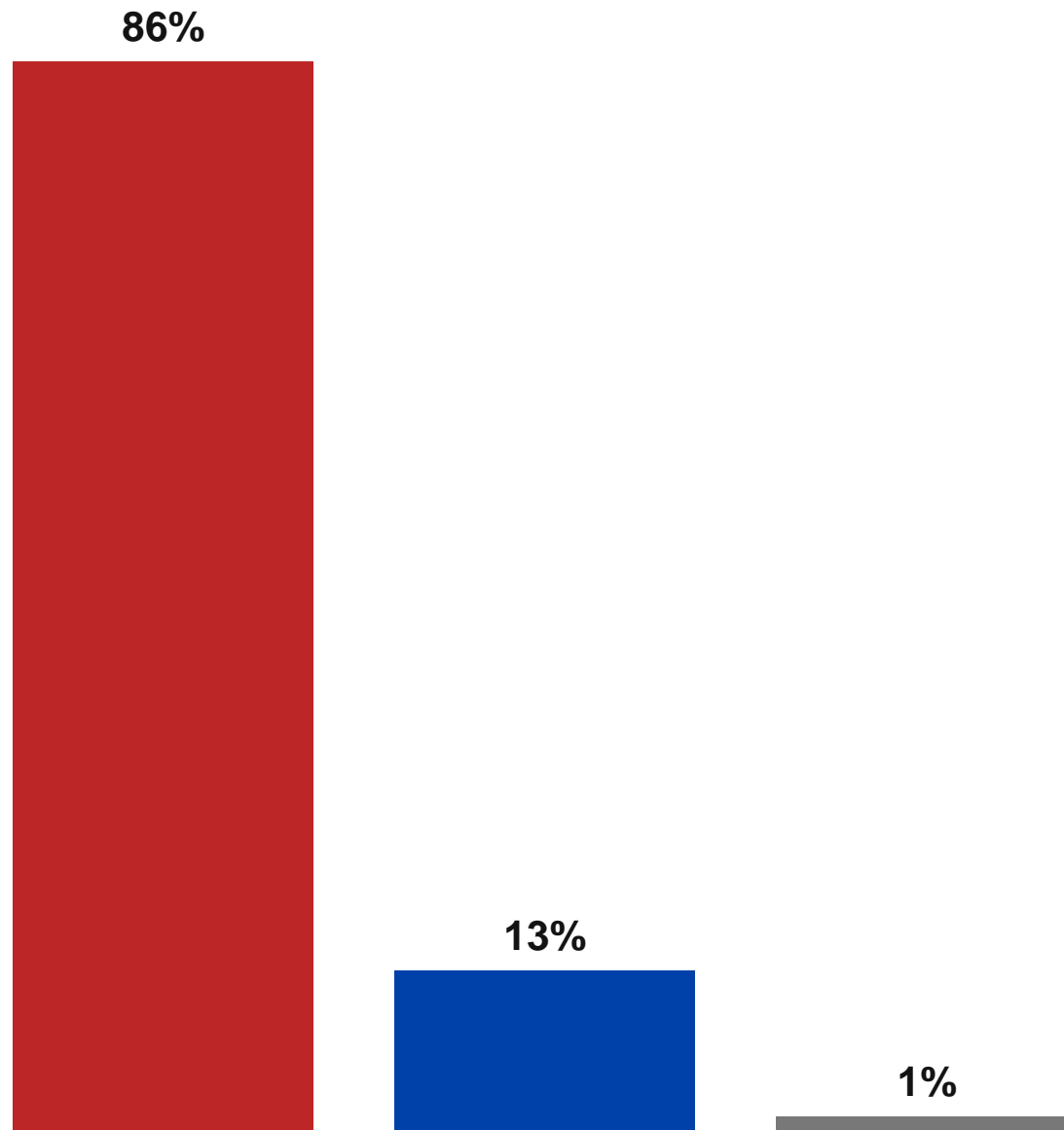
Q: What was your main activity during the last 06 months?

All respondents 400

Unpaid work does not create financial inclusion

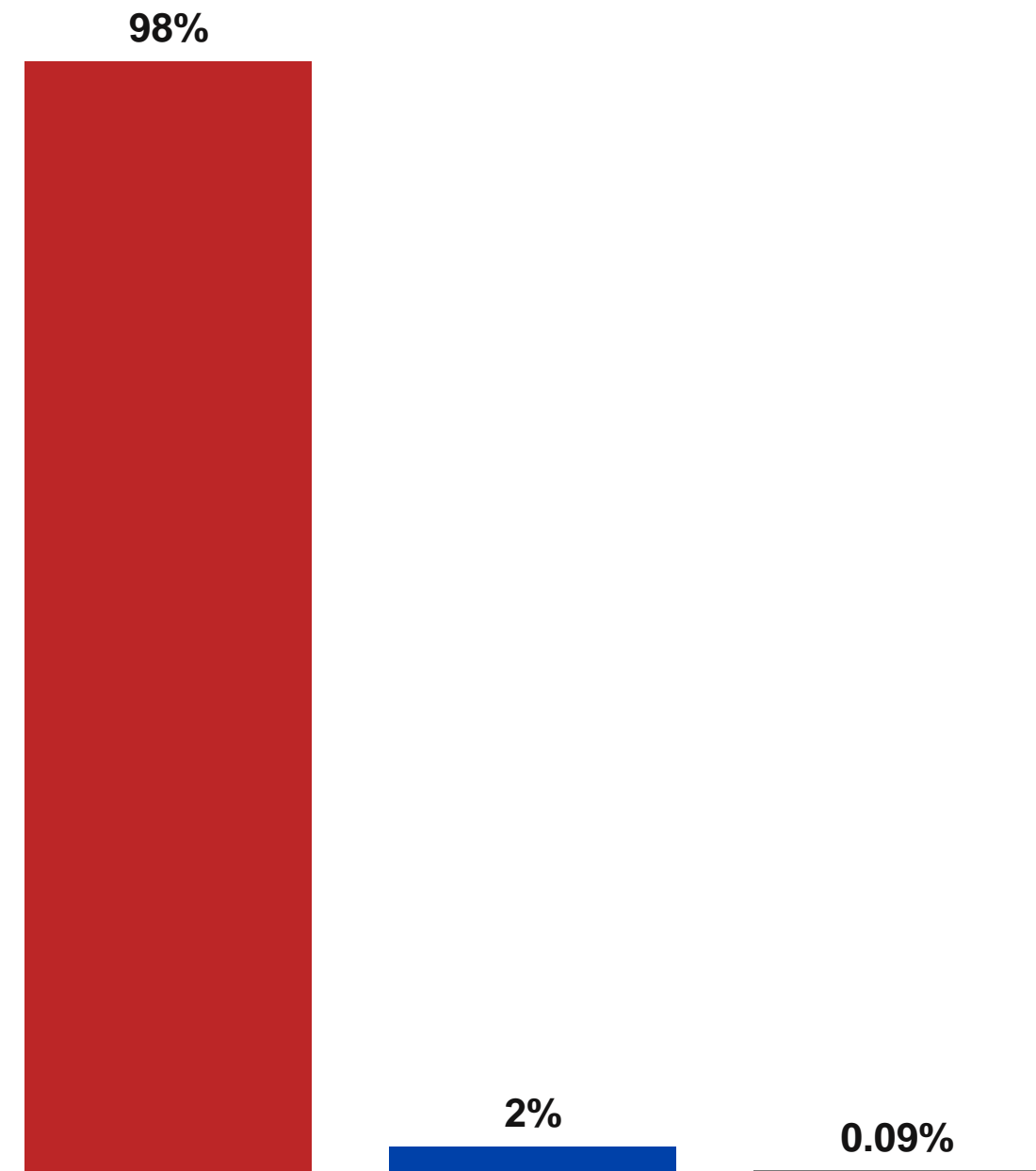
Access to bank account
(% of aged 15-65 PWD population)

■ No ■ My own ■ Someone els



Credit or Debit card ownership
(% of aged 15-65 PWD population)

■ Do not have both ■ Debit card only ■ Both debit and credit card



Q: Do you have access to a bank account?

All respondents 400

Q: Do you have a credit or debit card?

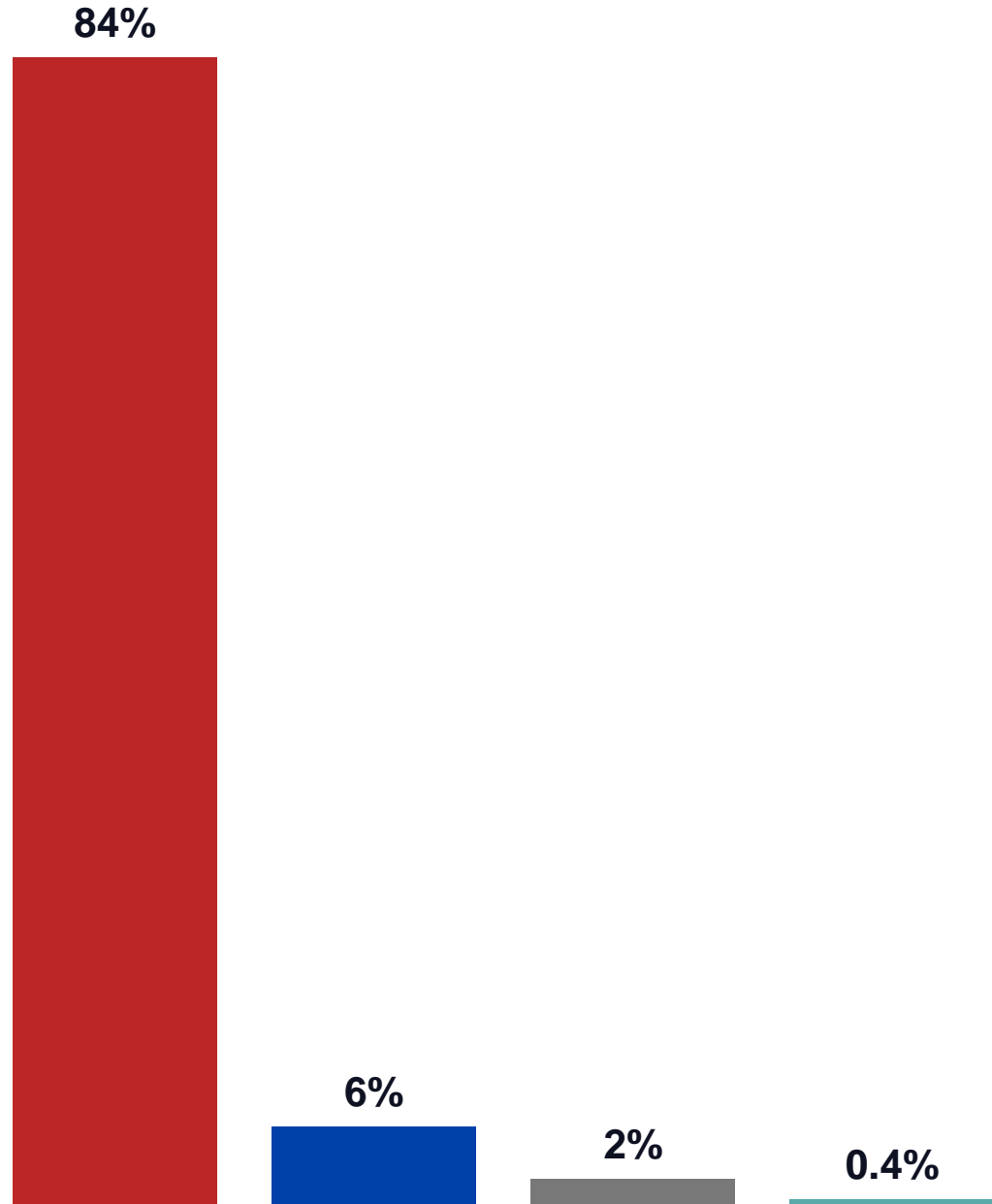
29 All respondents 400

HOUSEHOLD ICT DEVICES

One out of four households access internet through mobile phones/dongles which is the main access method

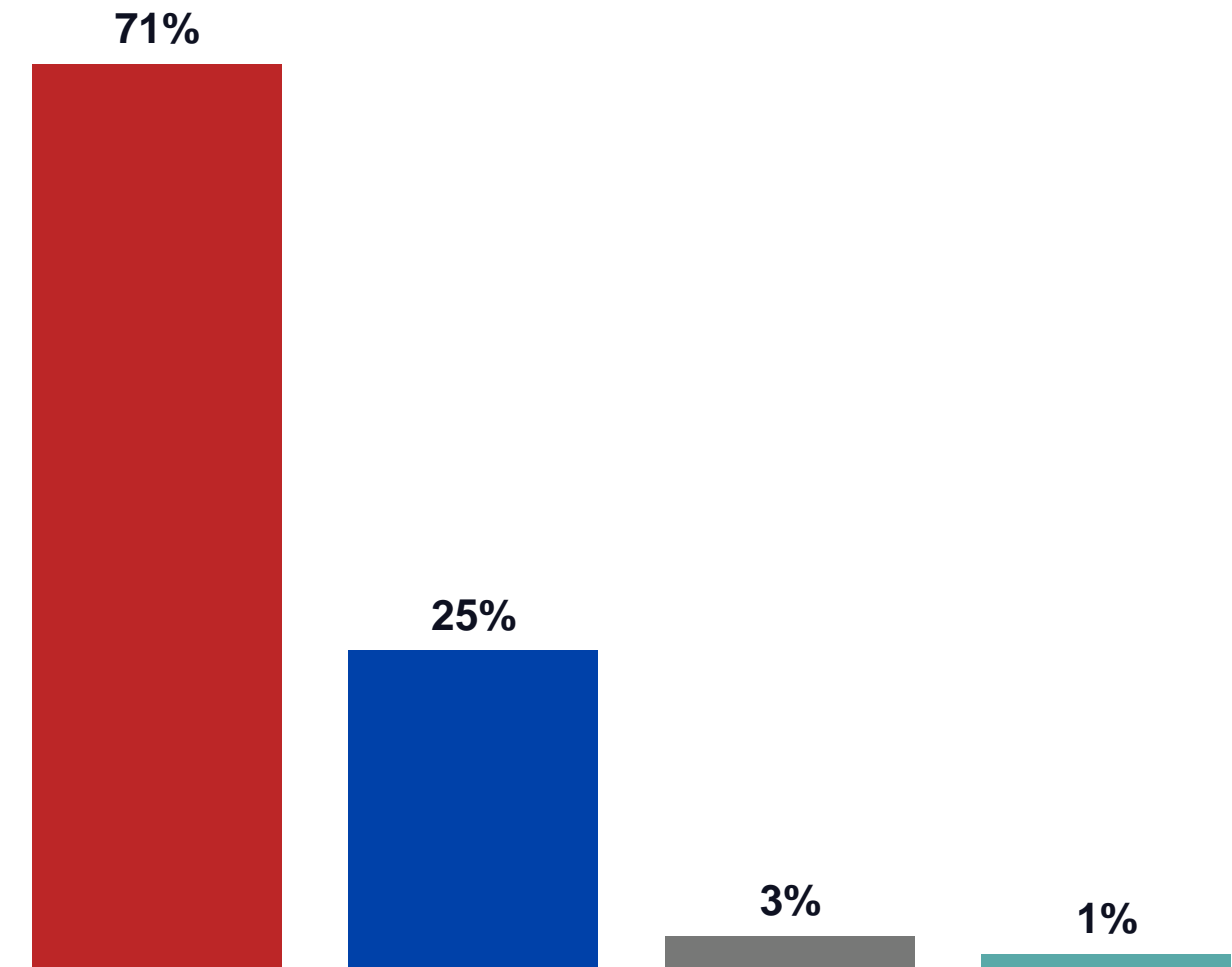
Availability of ICT devices (minimum one device or more) in the household (% of households with PWDs)

■ Mobile Phone ■ Laptop ■ Desktop ■ Tablet/iPad



Household internet connection type (% of households with PWDs)

■ No ■ Internet using mobile phones/dongles ■ Fiber/ADSL/CDMA ■ Both



Q: How many working Mobile phones/Desktop/Laptop/Tablets/iPads do you have in your household?

All households 400

Q: Does this household have a working internet connection, if so what type?

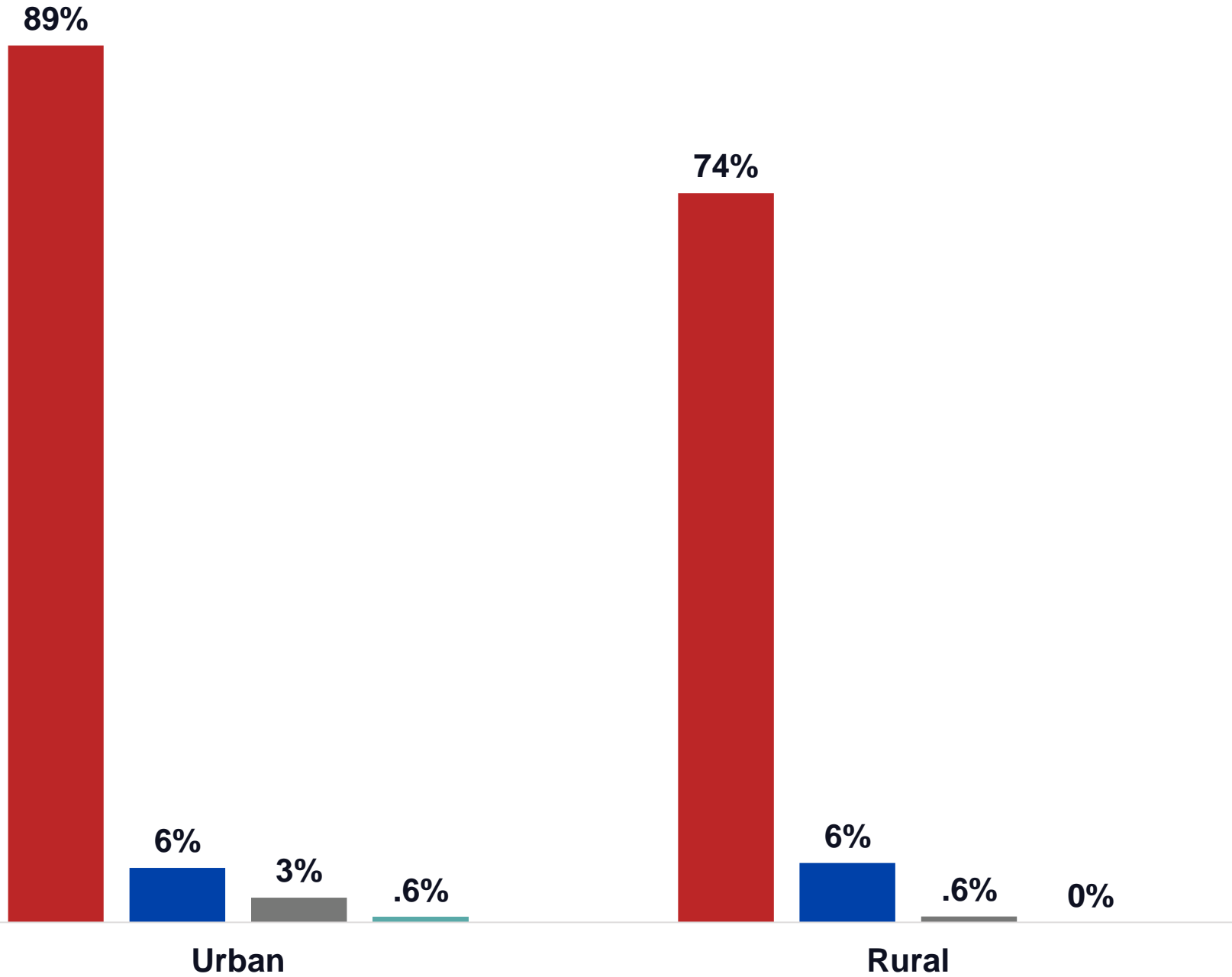
31

All households 400

Urban-rural gap is evident in mobile phone and Internet penetration

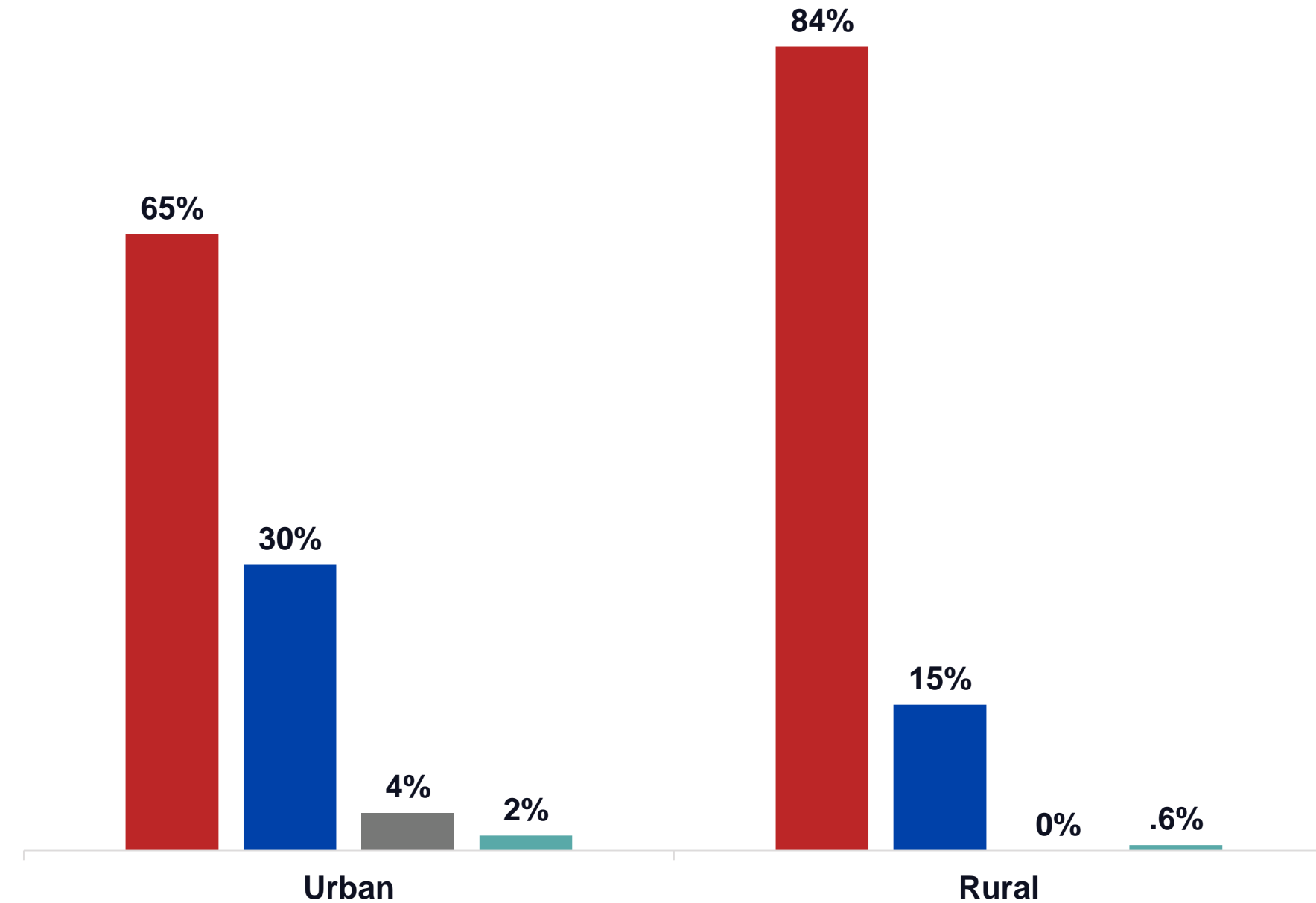
Availability of ICT devices (minimum one device or more) in the household (% of households with PWDs)

■ Mobile phone ■ Laptop ■ Desktop ■ Tablet/iPad



Household internet connection type (% of urban and rural households with PWDs)

■ No ■ Mobile phone/dongle ■ Fiber/ADSL/CDMA ■ Both



Q: How many working Mobile phones/Desktop/Laptop/Tablets/iPads do you have in your household?

All households 400

Low bases high margin of error (+/- 12% to 17%)

Q: Does this household have a working internet connection, if so what type?

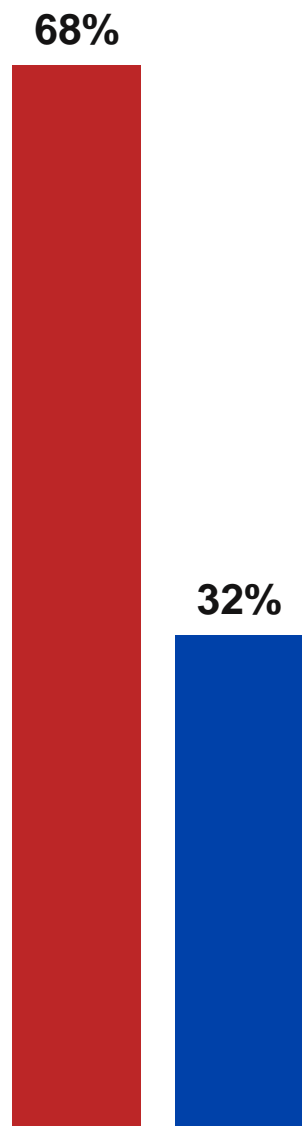
All households 400

MOBILE PHONE USE

Do not use phones due to disability and lack of knowledge

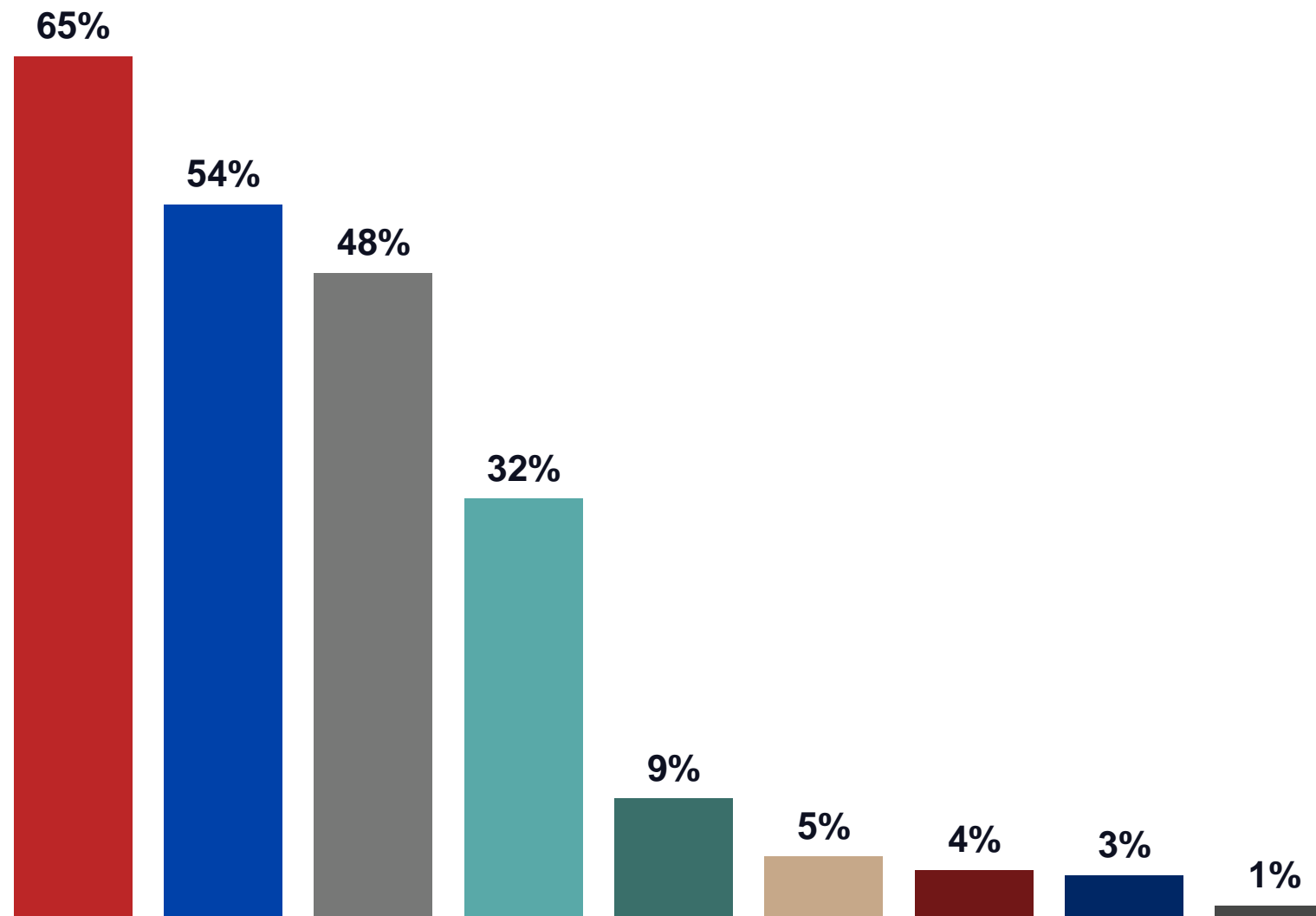
Ownership of mobile phone (% of aged 15-65 PWD population)

■ No ■ Yes



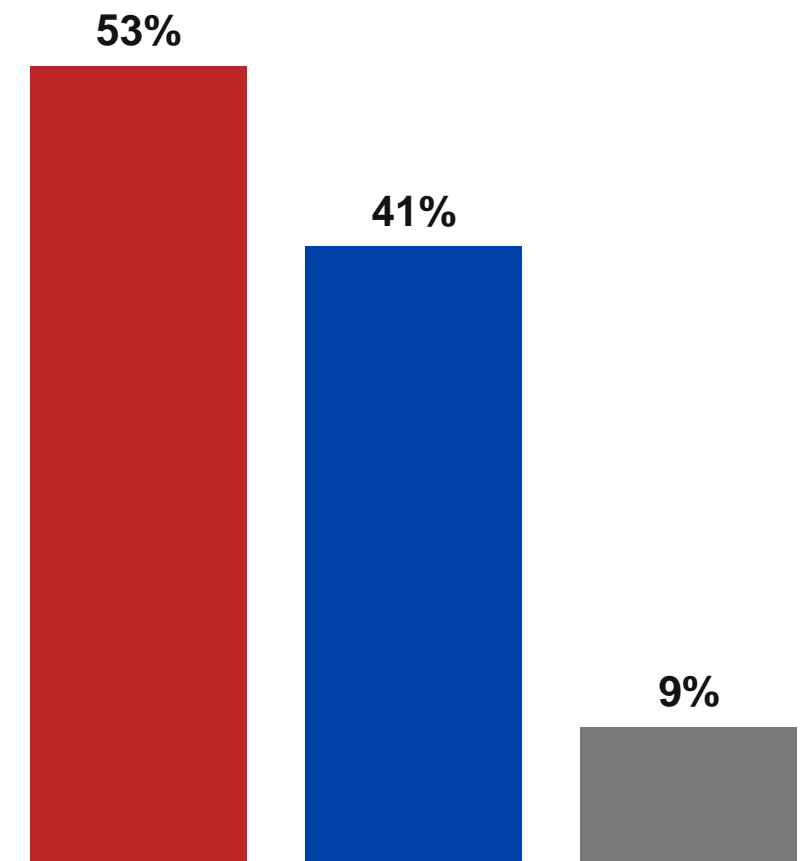
Reason for not having a mobile phone (% of 15-65 non mobile phone use PWD population)

- I'm not able to use one because of my disability (Can include not being accessible)
- I don't know how to use it
- I don't need it
- I cannot afford a mobile phone
- I am not allowed to own one
- No mobile coverage where I live
- No electricity at home to charge the mobile phone



Type of mobile phone ownership (% of mobile phone owners aged 15-65 PWD population)

■ Basic phone ■ Smart phone ■ Feature phone



Q: Do you own a mobile phone?

All respondents 400

Q: Why do not you have a mobile phone?

Non-owners of mobile phone 271 34

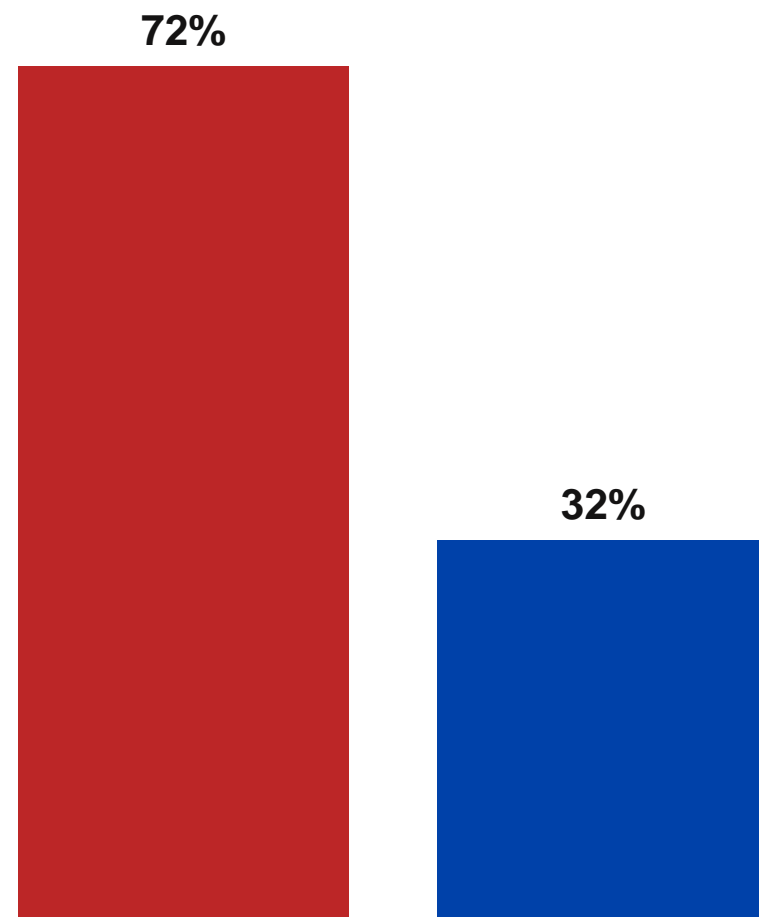
Q: What type of mobile phone do you have?

Mobile phone owners 129

Nepal PWDs lag on connectivity

Mobile phone ownership (% of 15-65 population/ % of 15-65 mobile phone own PWD population)

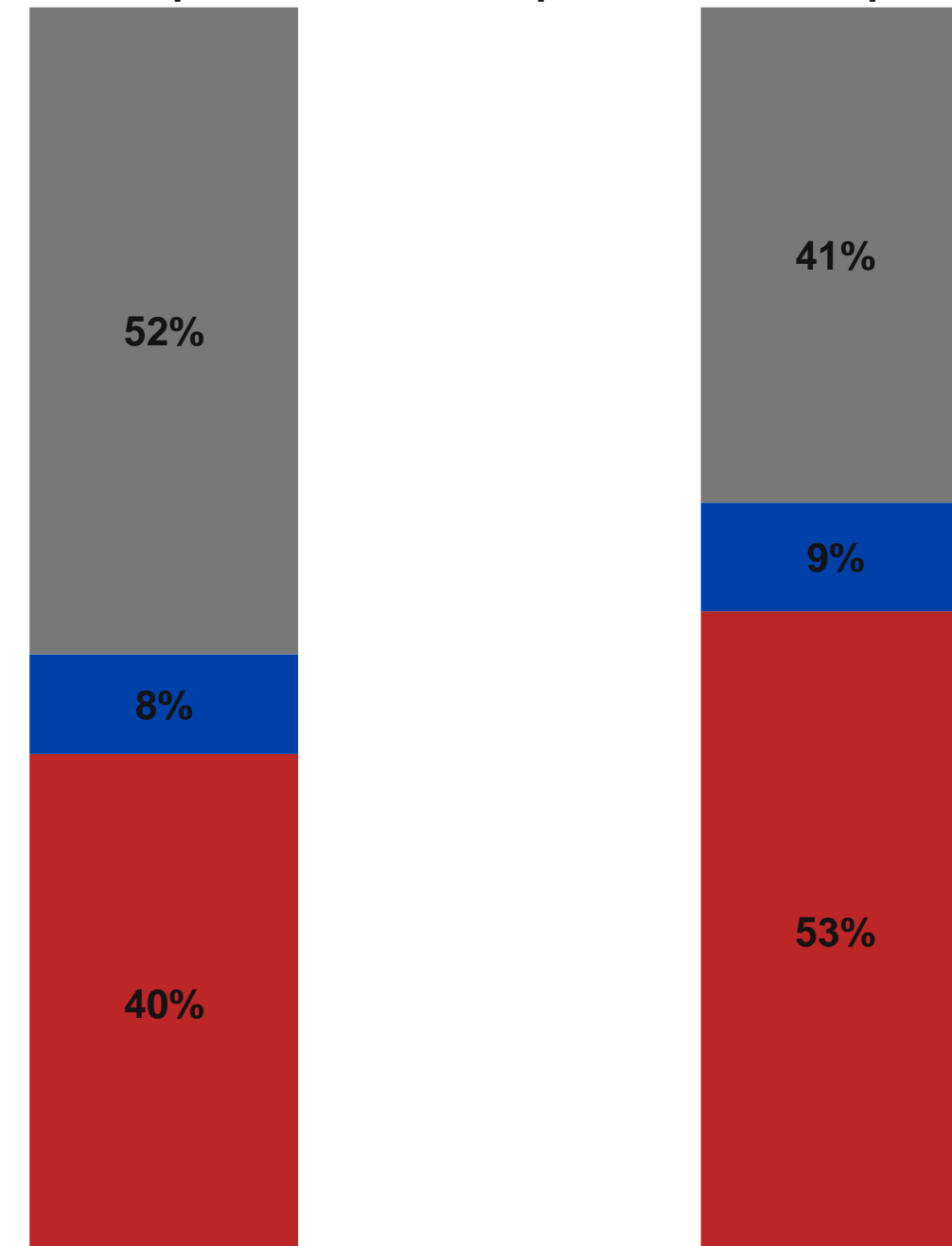
■ Nepal ■ Nepal PWD



| Base | Nepal (national sample) | PWD |
|-----------------|-------------------------|-----|
| All respondents | 2,008 | 400 |

Type of mobile phone owned (% of all aged 15-65 mobile owners/ % of 15-65 mobile own PWD population)

■ Basic phone ■ Feature phone ■ Smart phone

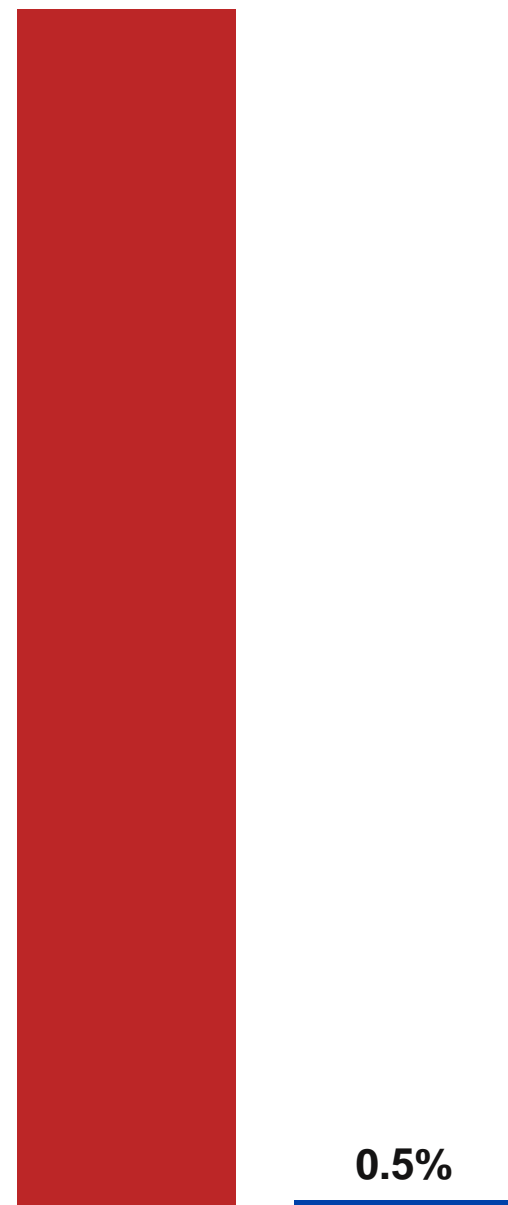


| Base | Nepal (national sample) | PWD |
|---------------|-------------------------|-----|
| Mobile owners | 1,478 | 129 |

Almost everyone uses prepaid connections

Mobile phone contract type (% of aged 15-65 mobile phone owning PWD population)

■ Prepaid ■ Postpaid

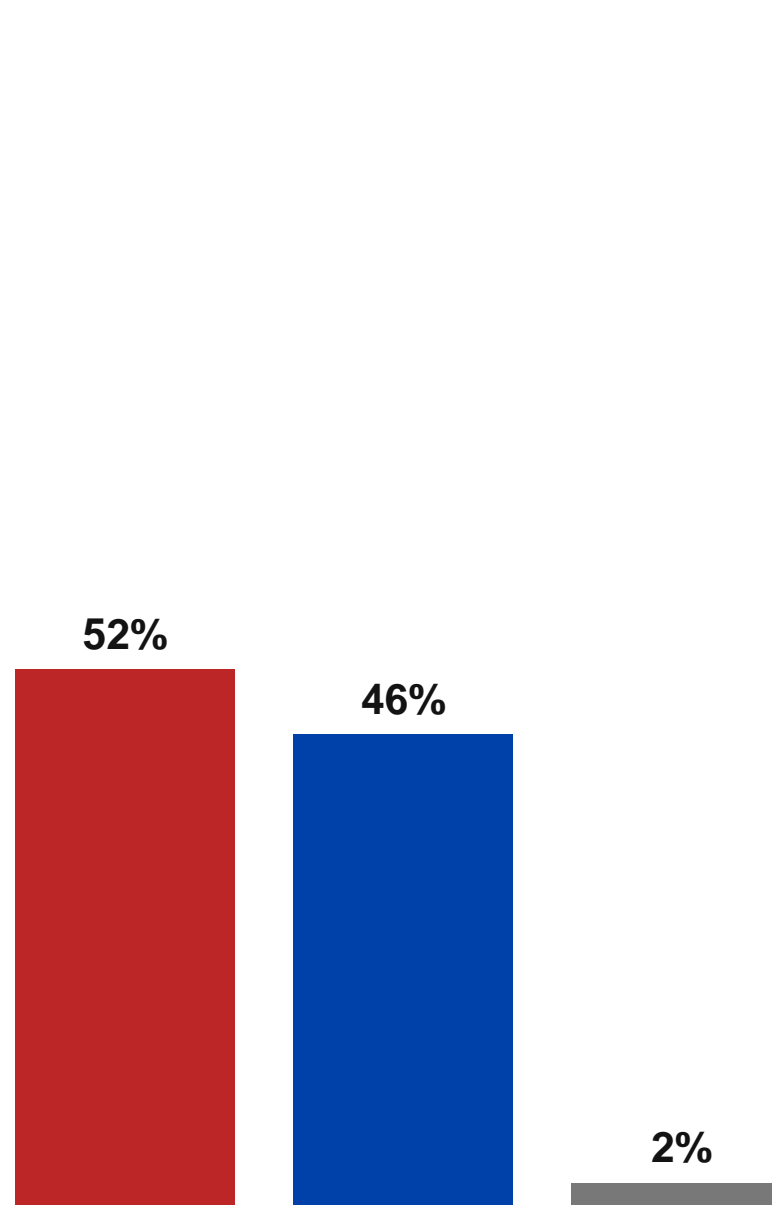


Q: Is your mobile phone Prepaid/Postpaid?

Mobile phone owners 129

Main operator of mobile phone users (% of aged 15-65 mobile phone owning PWD population)

■ NCELL ■ NTC ■ NTC SKY

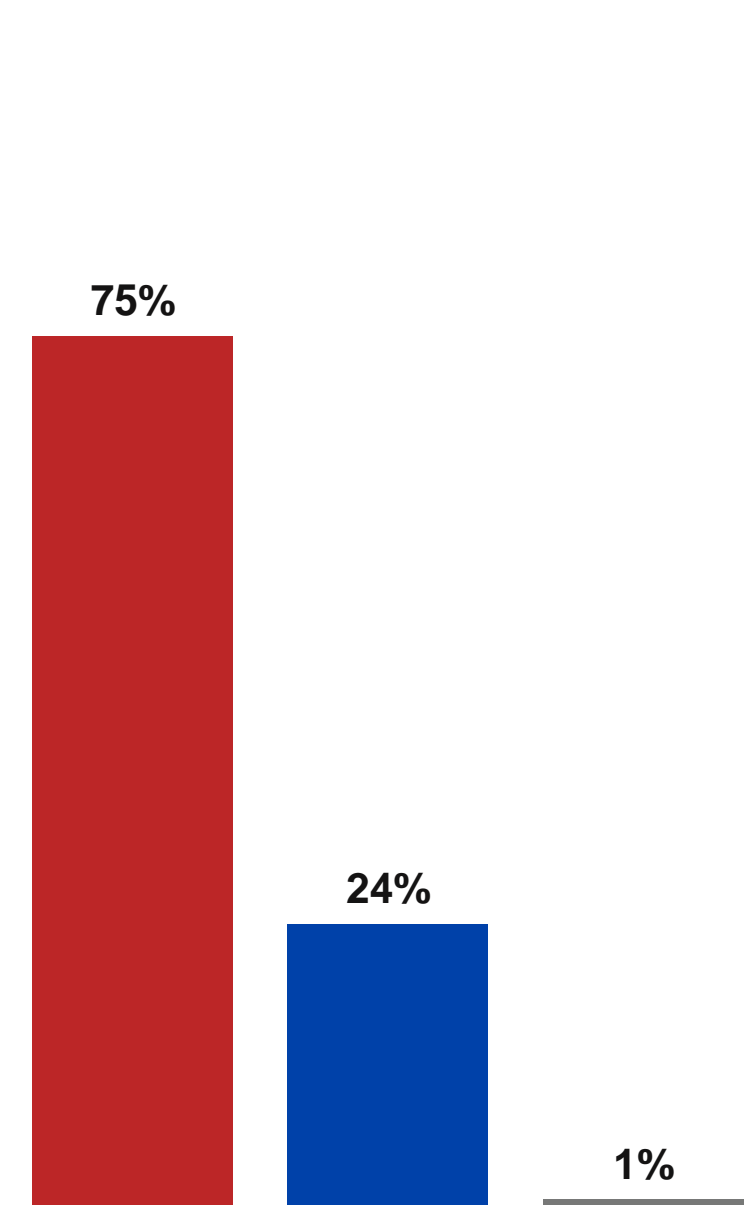


Q: What is the name of the main operator?

Mobile phone owners 129 36

Number of sim cards owned by mobile phone users (% of aged 15-65 mobile phone owning PWD population)

■ 1 Sim ■ 2 Sim ■ 3 Sim



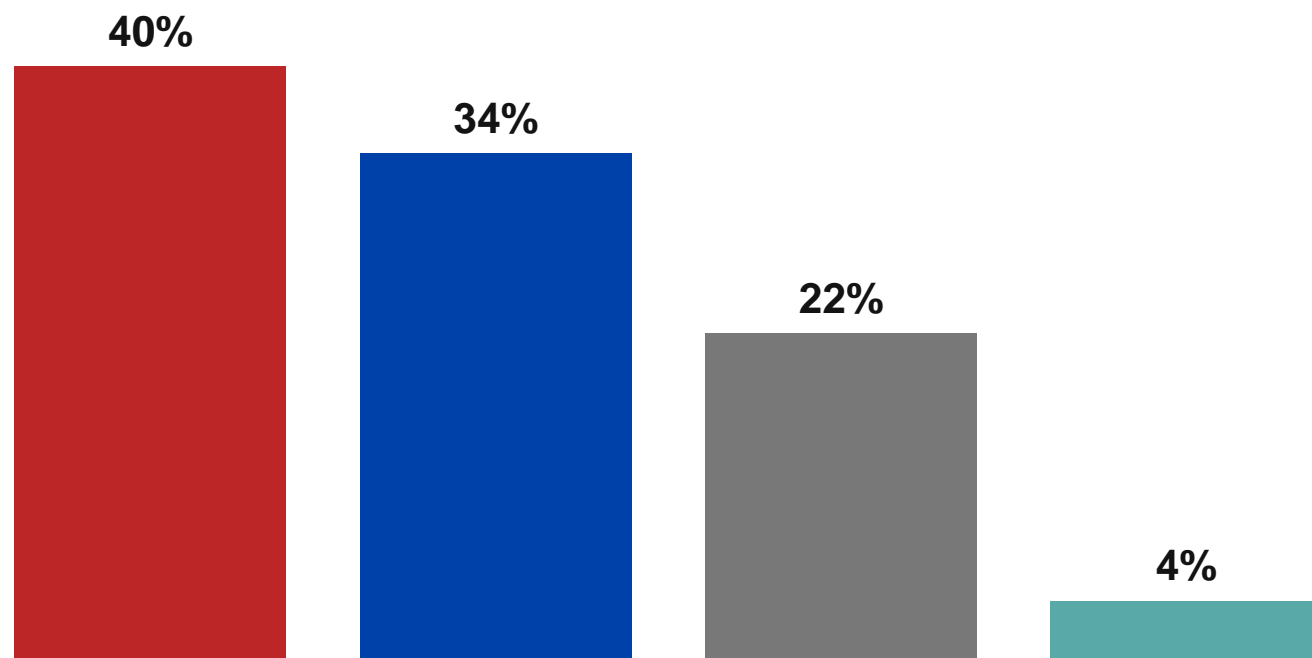
Q How many active sim cards do you have?

Mobile phone owners 129

Other phone type users think smart phones are not needed and not affordable

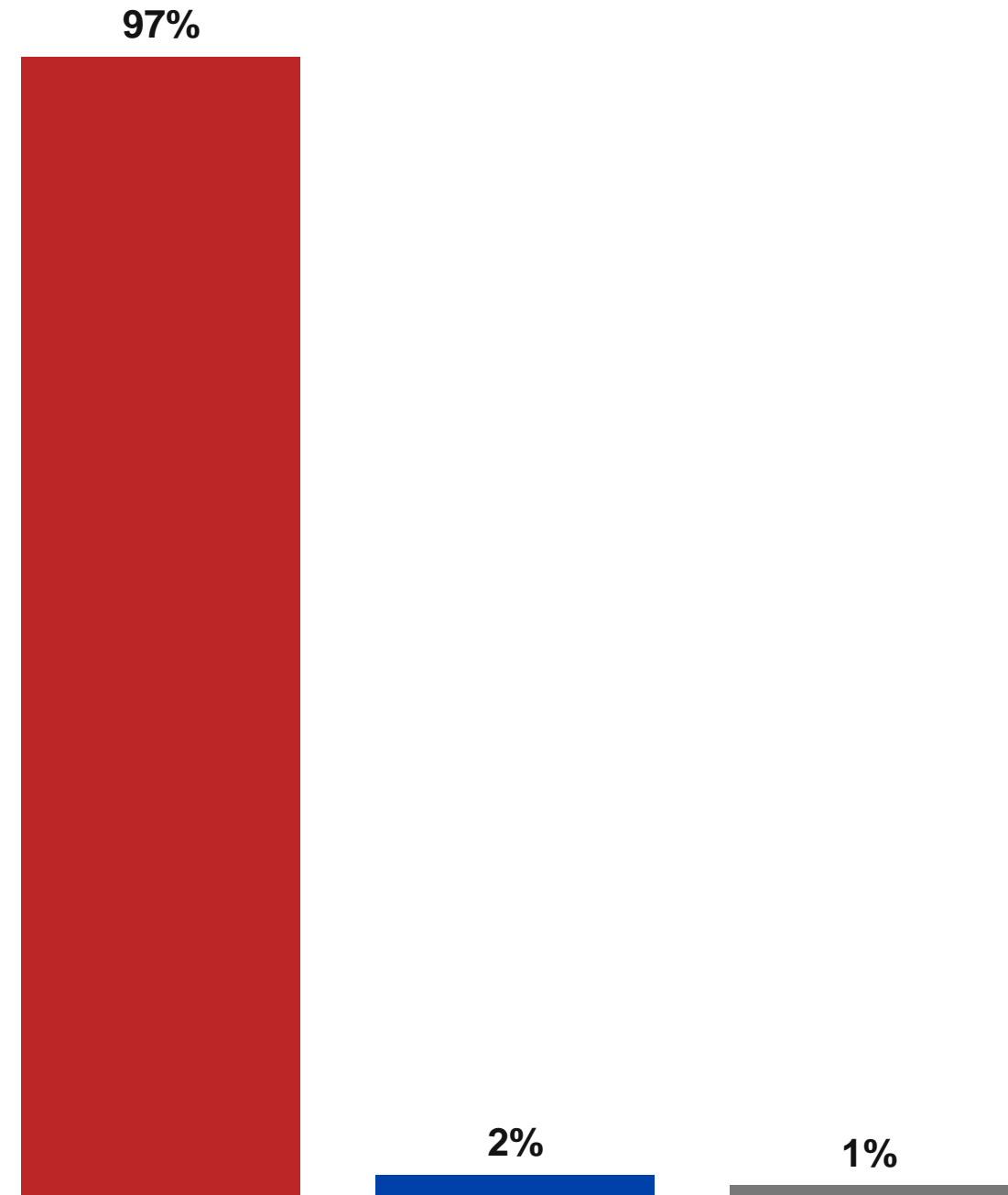
Reason for not having smart/touch phone (% of aged 15-65 Basic and feature phone owned PWD population)

- Do not need one
- Can not afford
- Complicated
- Other



Smart phone operating system (% of aged 15-65 smart phone owning PWD population)

- Android
- IOS
- Other



Q: Primary reason for not having a smart or touch phone?

Q Which operating system does your smart phone have?

Basic and feature phone owners 70*

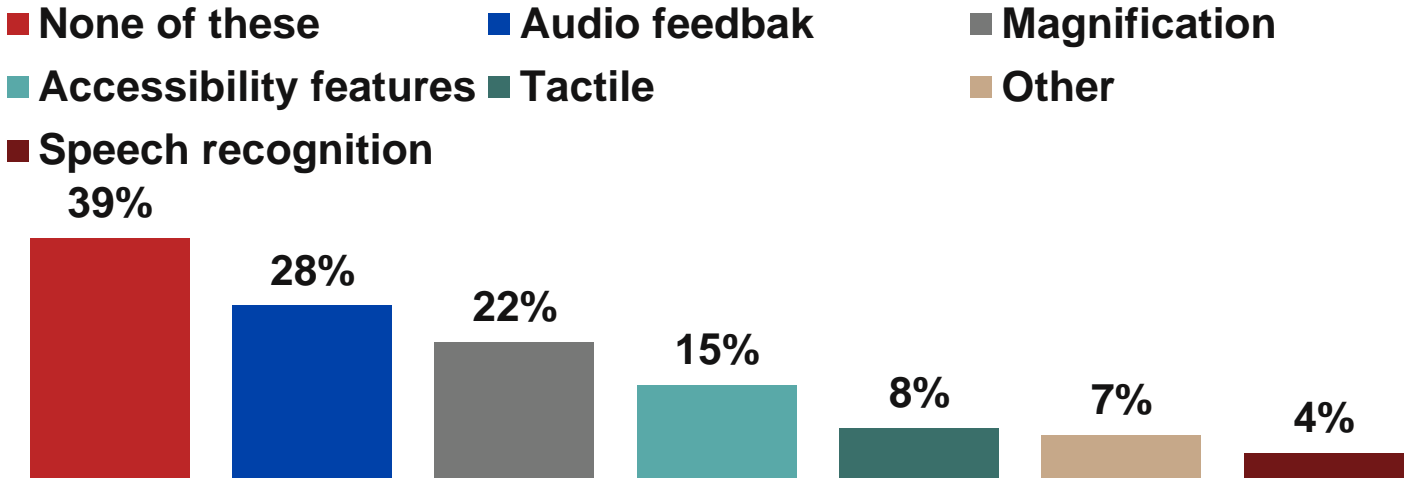
37

Smart phone users 59*

*Low bases

Low use of disability specific assistive features

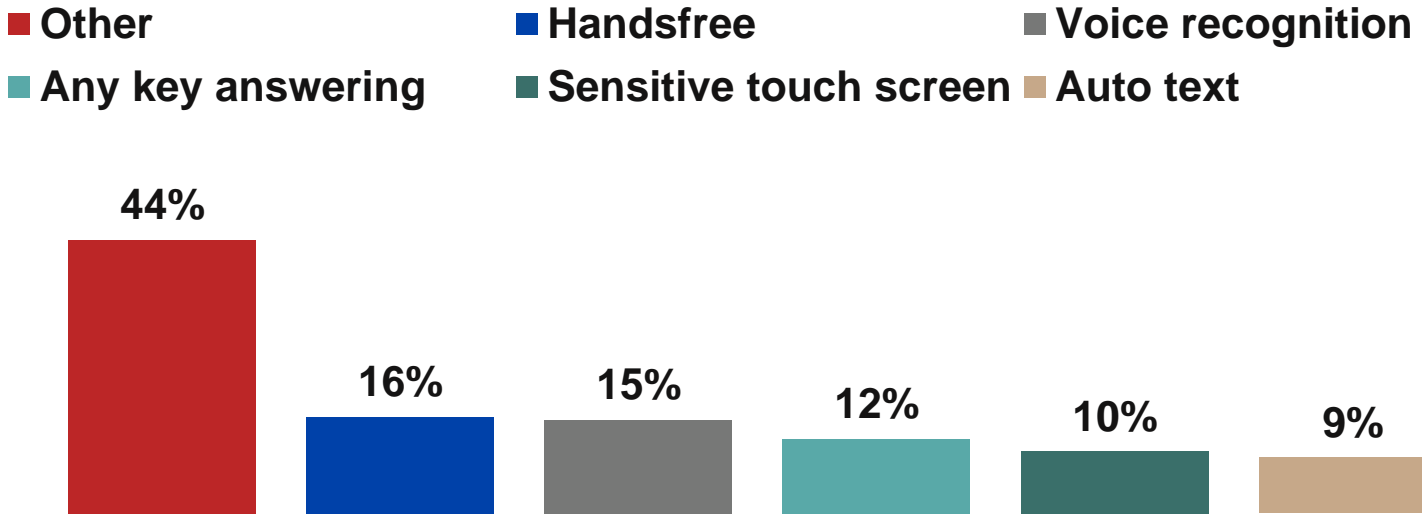
Features used by respondents with seeing difficulties (% of 15-65 seeing difficulty PWD population)



Q: What are the features use by respondents with difficulty of seeing?

Respondents with seeing difficulty 36*

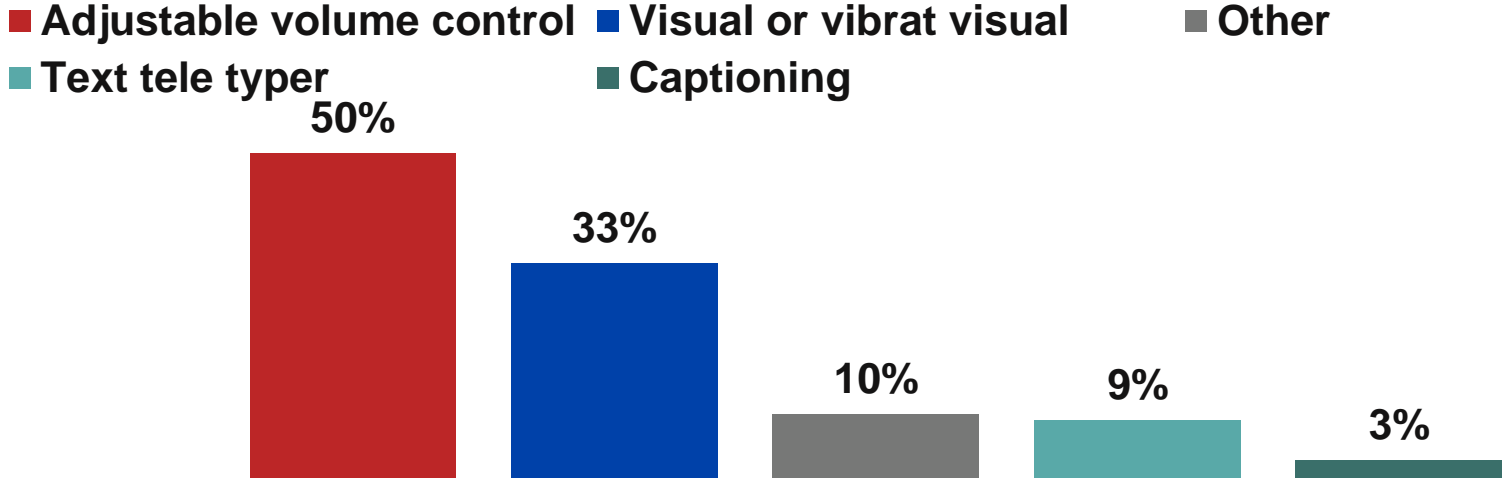
Features used by respondents with self caring and carrying out activities with hand (% of aged 15-65 d PWD population who has difficulty of caring out activities with hand)



Q: What are the features use by respondents with difficulty of self caring/carrying out activities?

Respondents with difficulty with caring out activities with hand 46*

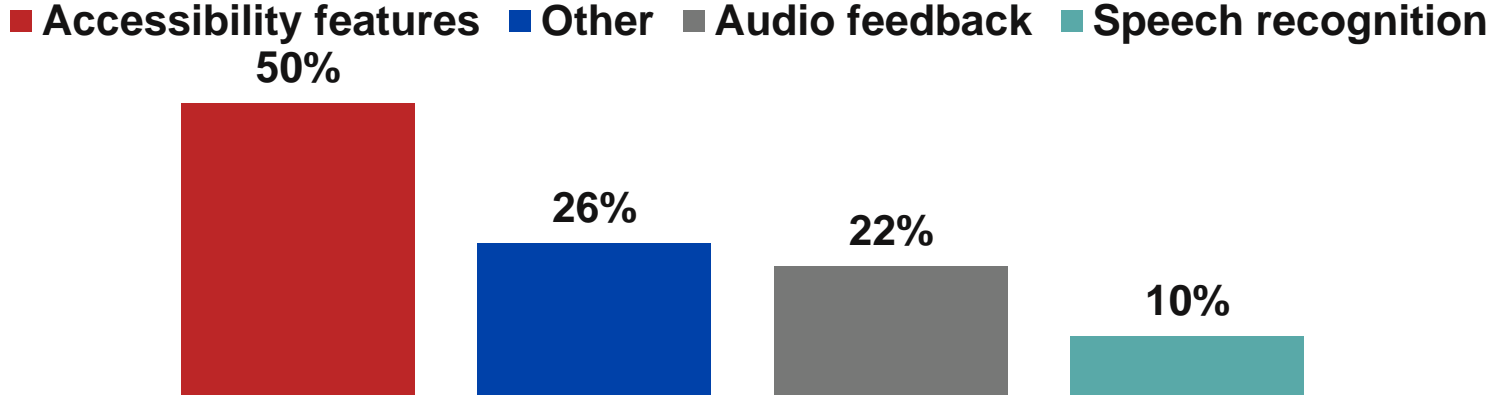
Features used by respondents with hearing difficulties (% of 15-65 hearing difficulty PWD population)



Q: What are the features use by respondents with difficulty of hearing?

Respondents with hearing difficulties 20*

Features used by respondents with communicating/concentrating difficulties (% of 15-65 with communicating/concentrating difficulties PWD population)



Q: What are the features use by respondents with difficulty of communicating/concentrating?

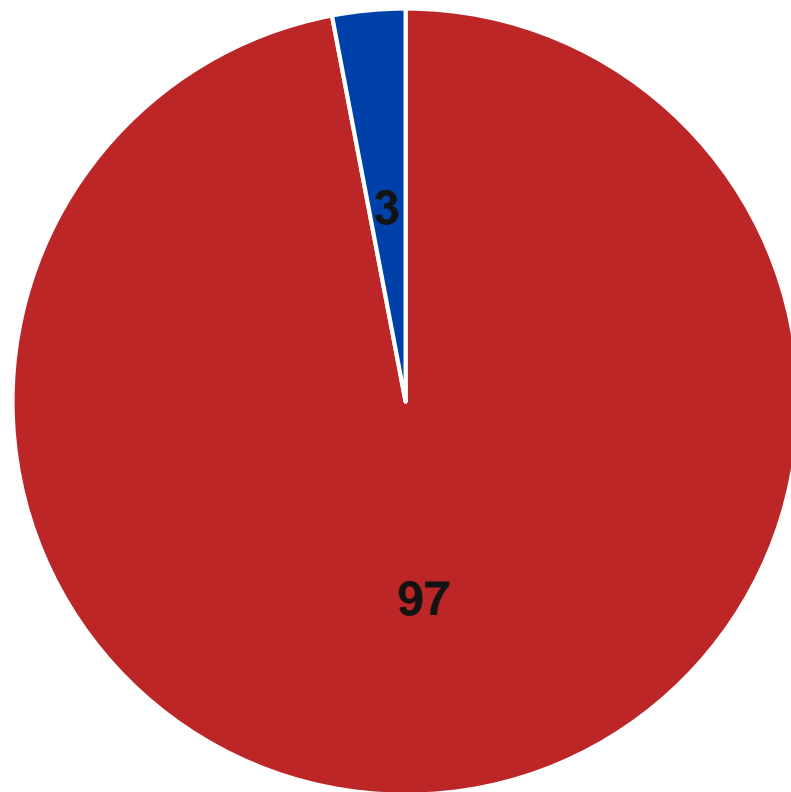
38 Respondents with difficulty of communicating /concentrating 12*

* Low bases

Need others' help for all functions

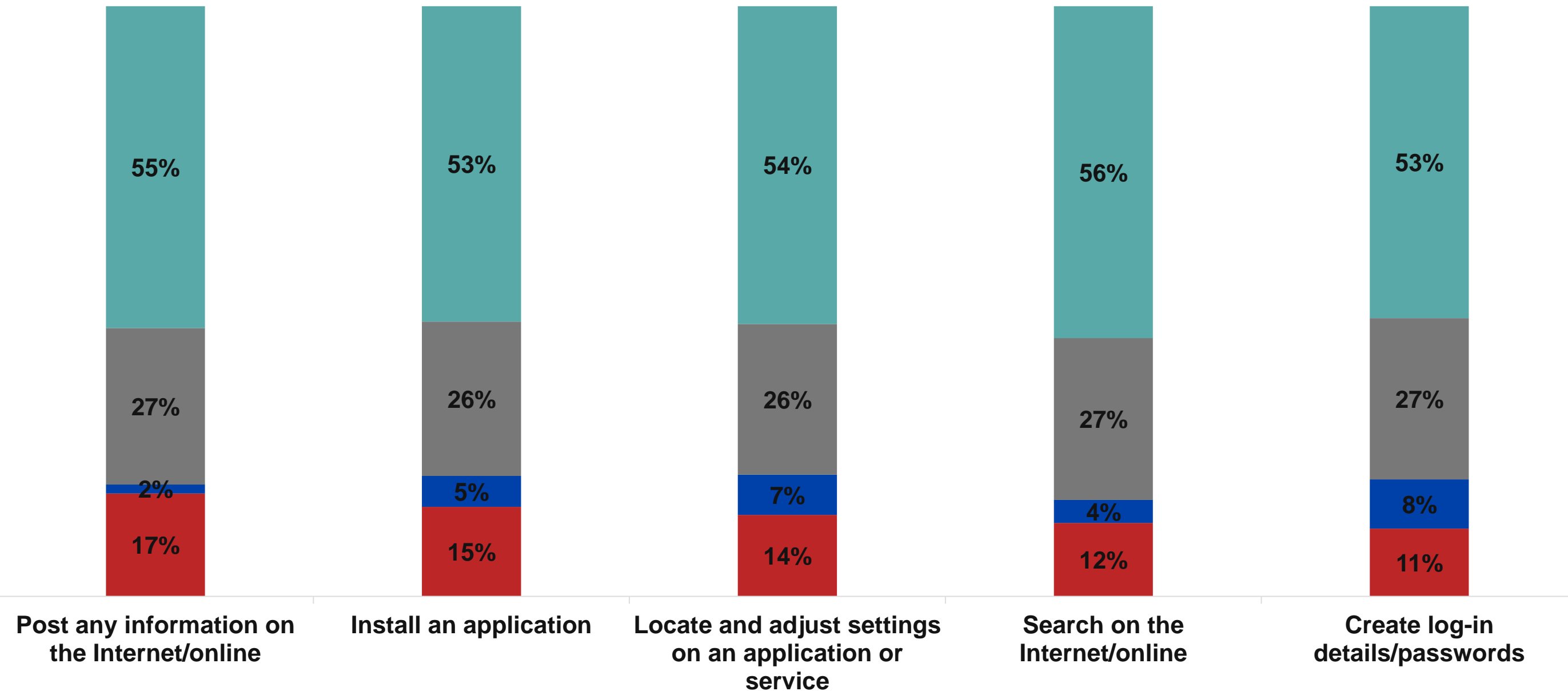
Use of special mobile plans or packages for PWD (% of 15-65 mobile phone use PWD population)

■ No ■ Yes



Activities ever done on mobile phone (% of all 15-65 mobile phone used PWD population)

■ Yes, by myself ■ Yes, with help from someone else ■ Not aware of these ■ No



Post any information on the Internet/online

Install an application

Locate and adjust settings on an application or service

Search on the Internet/online

Create log-in details/passwords

Q 01: Have you searched information on the internet?

Q 02: Have you installed an application?

Q 03: Have you created log-in details and a password to use a particular service or a website?

Q 04: Have you located and adjusted settings on an application or service

Q 05: Have you posted any information on the internet/online?

Q: Do you use any special mobile plans/packages available for disabled?

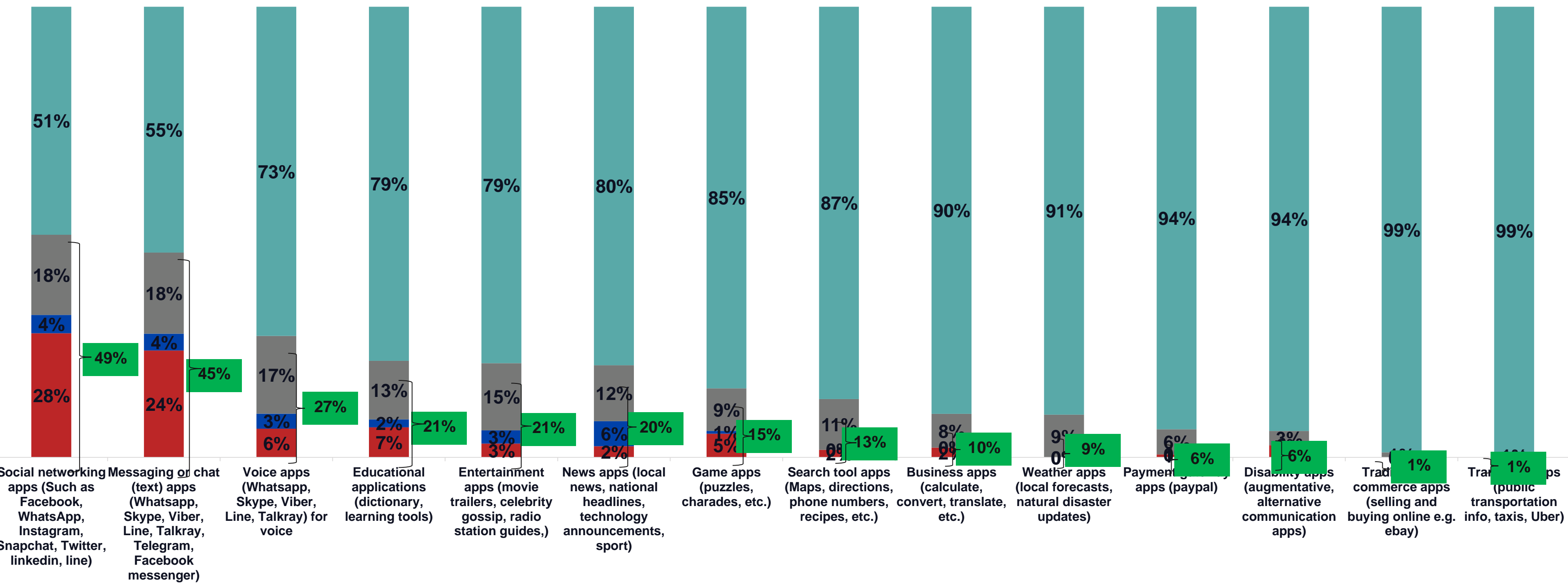
Mobile phone owners 129

Mobile phone owners 129

Messaging, Chat and Social Networking Apps are most used

Application usage on the mobile phones (% of aged 15-65 smart and feature phone users of PWD population)

■ Yes, daily ■ Weekly ■ Yes, occasionally ■ Never



Q: Do you use these mobile apps on your phone (eg: disability apps/social networking)? What is the frequency of using those apps?

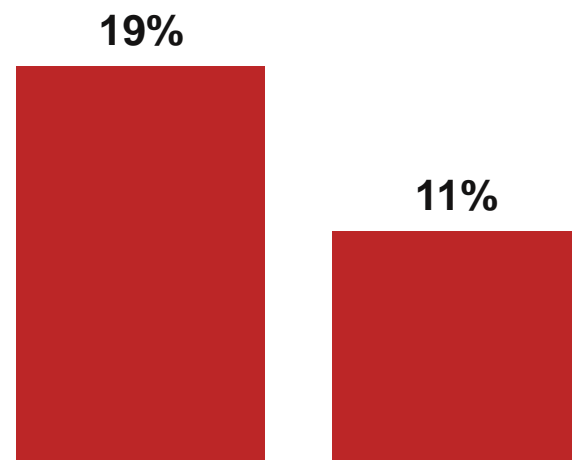
Smart and feature phone users 68*

INTERNET USE

Most accessed Internet first on mobile phone; it still is the most frequently used interface

Awareness and usage of the Internet
(% of aged 15-65 PWD population)

■ Yes



Internet accessed device
for the first time (% of aged 15-65 PWD population has accessed internet)

■ Mobile phone ■ Desktop/Laptop

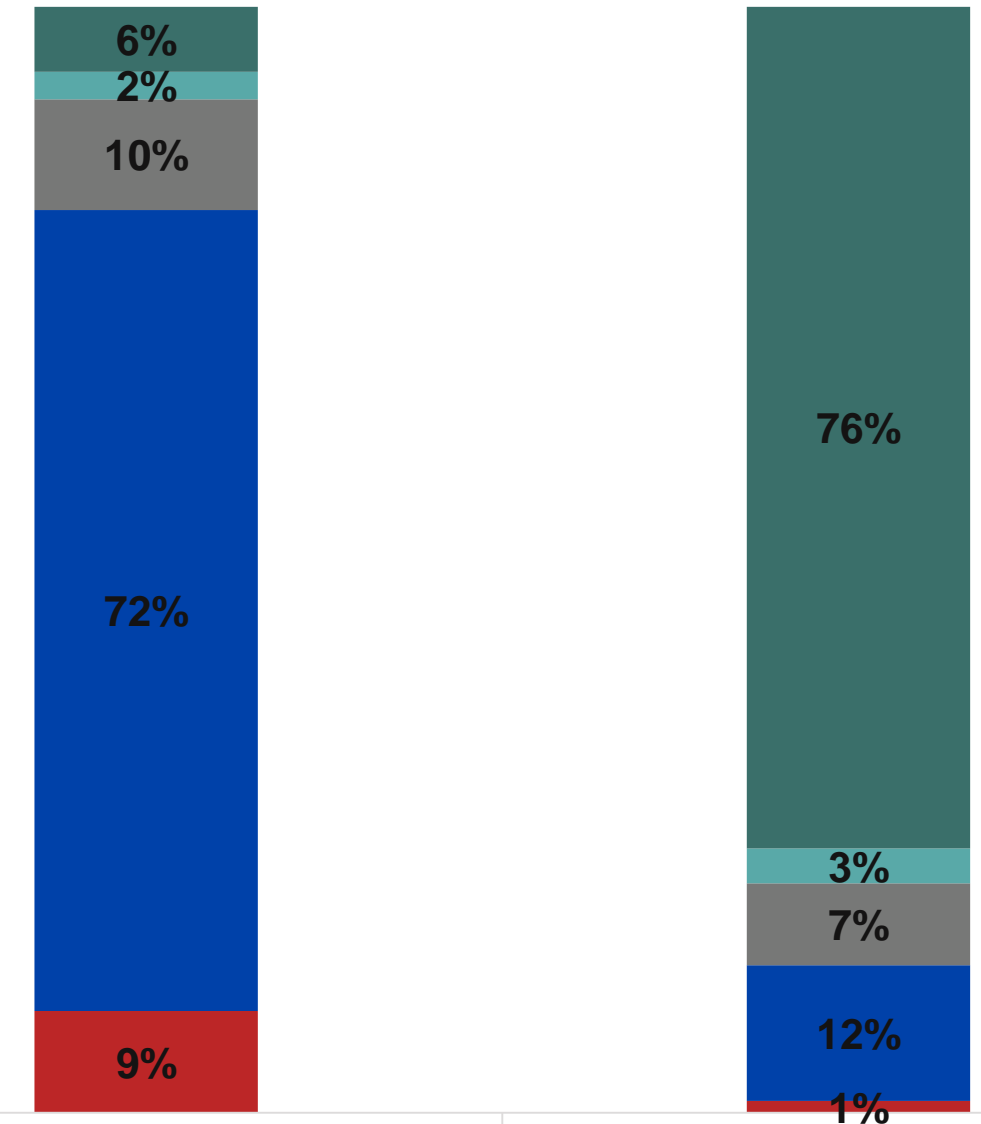


Q On which device you accessed internet for the first time?

No of persons accessed internet 52*

Frequency of accessing Internet on devices
(% of aged 15-65 PWD Internet users)

■ Once a hour ■ Once a day
■ Once a month ■ Less than once a month
■ Not at all



Mobile phone/Tablet

Desktop/Laptop

Q How often do you access internet on mobile phone/Computer

No of persons accessed internet 52*

* Low base

Q1: Do you know what the internet is?

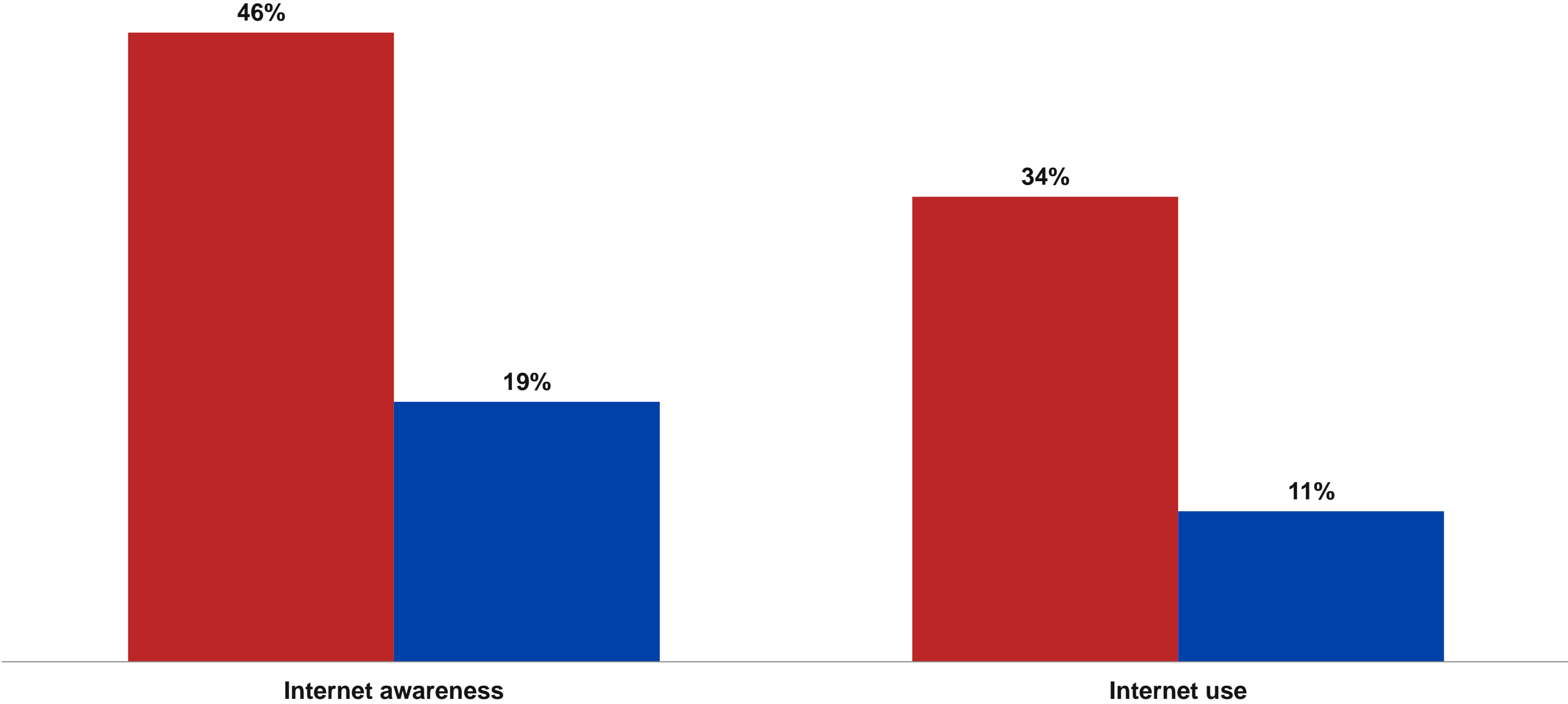
Q2: Have you ever used internet (gmail/google/facebook) ?

All respondents 400

PWD in Nepal lag far behind in Internet awareness and use

Internet awareness and use (% of aged 15-65 population/% of aged 15-65 PWD population internet users)

■ Nepal ■ Nepal PWD

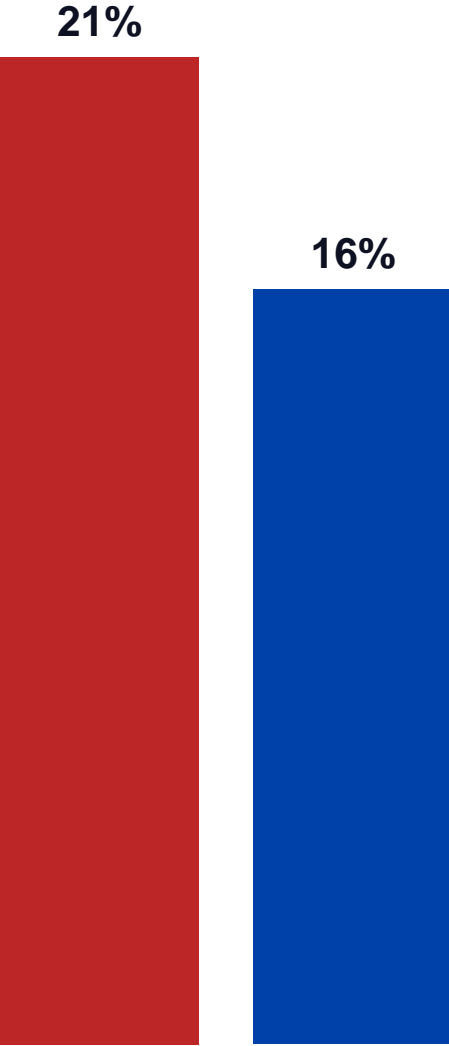


| Base | Nepal (national sample) | PWD |
|-----------------|-------------------------|-----|
| All respondents | 2,008 | 400 |

Being urban and male provides more opportunity to engage with the Internet

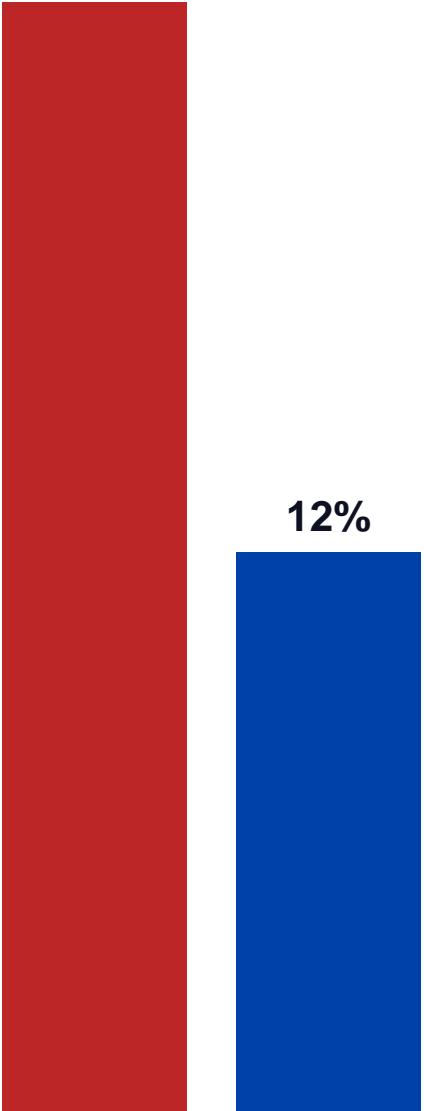
Gender representation of the respondents those who know what the internet is (% of aged 15-65 PWD population)

■ Male ■ Female



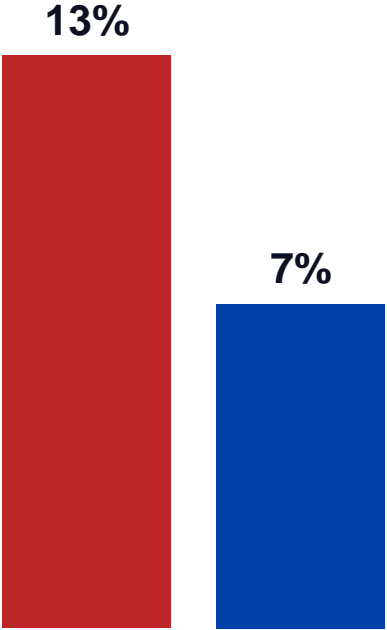
Area representation of the respondents those who know what the internet is (% of aged 15-65 PWD population)

■ Urban ■ Rural
23%



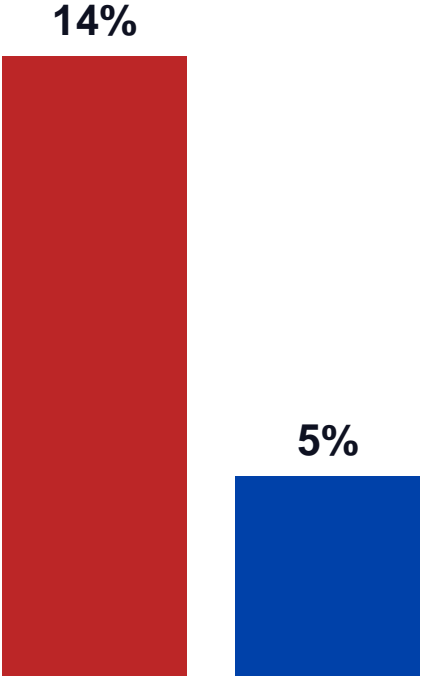
Gender representation of the respondents those who have ever used internet (% of aged 15-65 PWD population)

■ Male ■ Female



Area representation of the respondents those who know what the internet is (% of aged 15-65 PWD population)

■ Urban ■ Rural



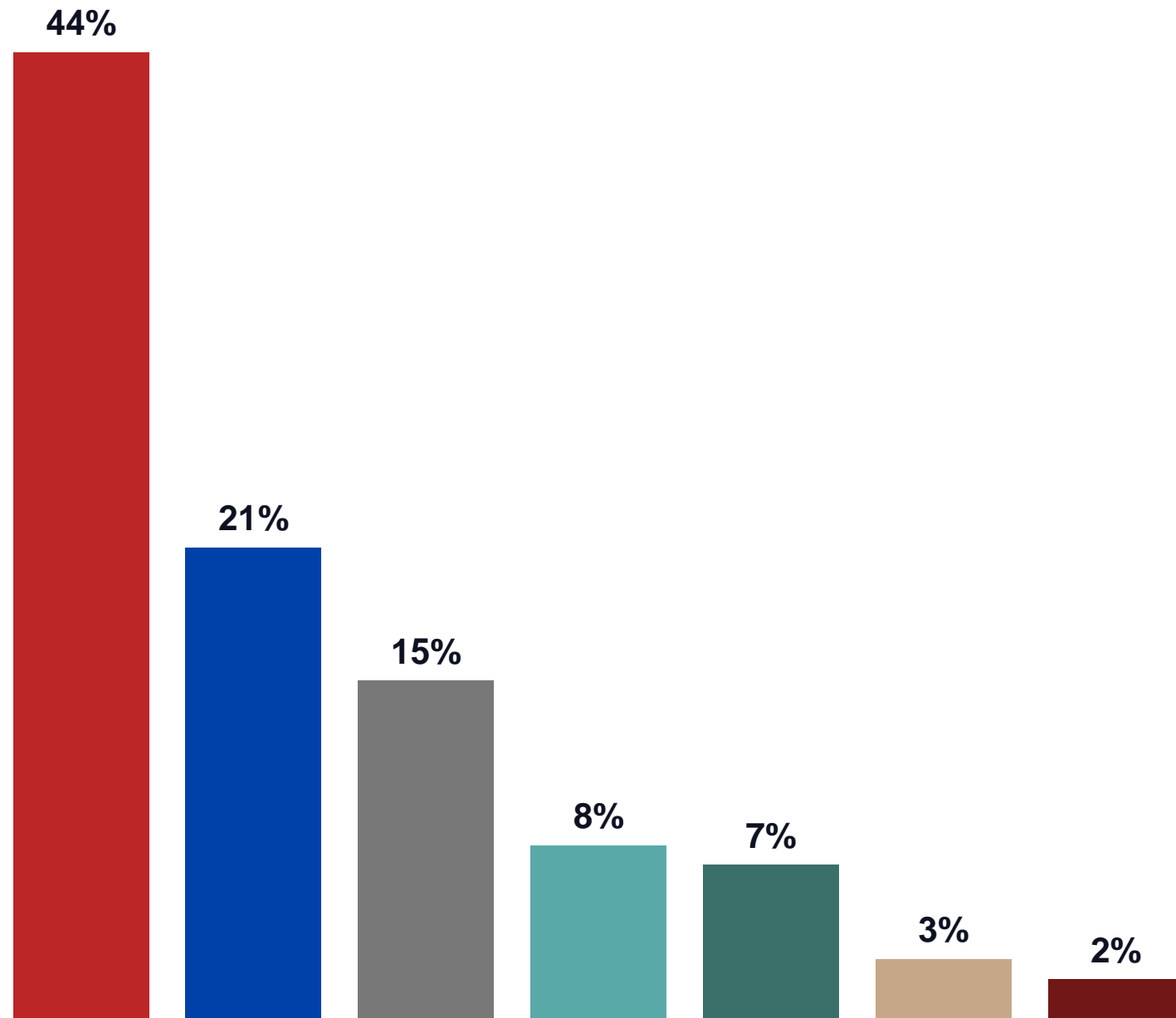
Q: Do you know what the internet is?

Q: Have you ever used internet (gmail/google/facebook) ?

Chatting on social media is the most attractive Internet activity

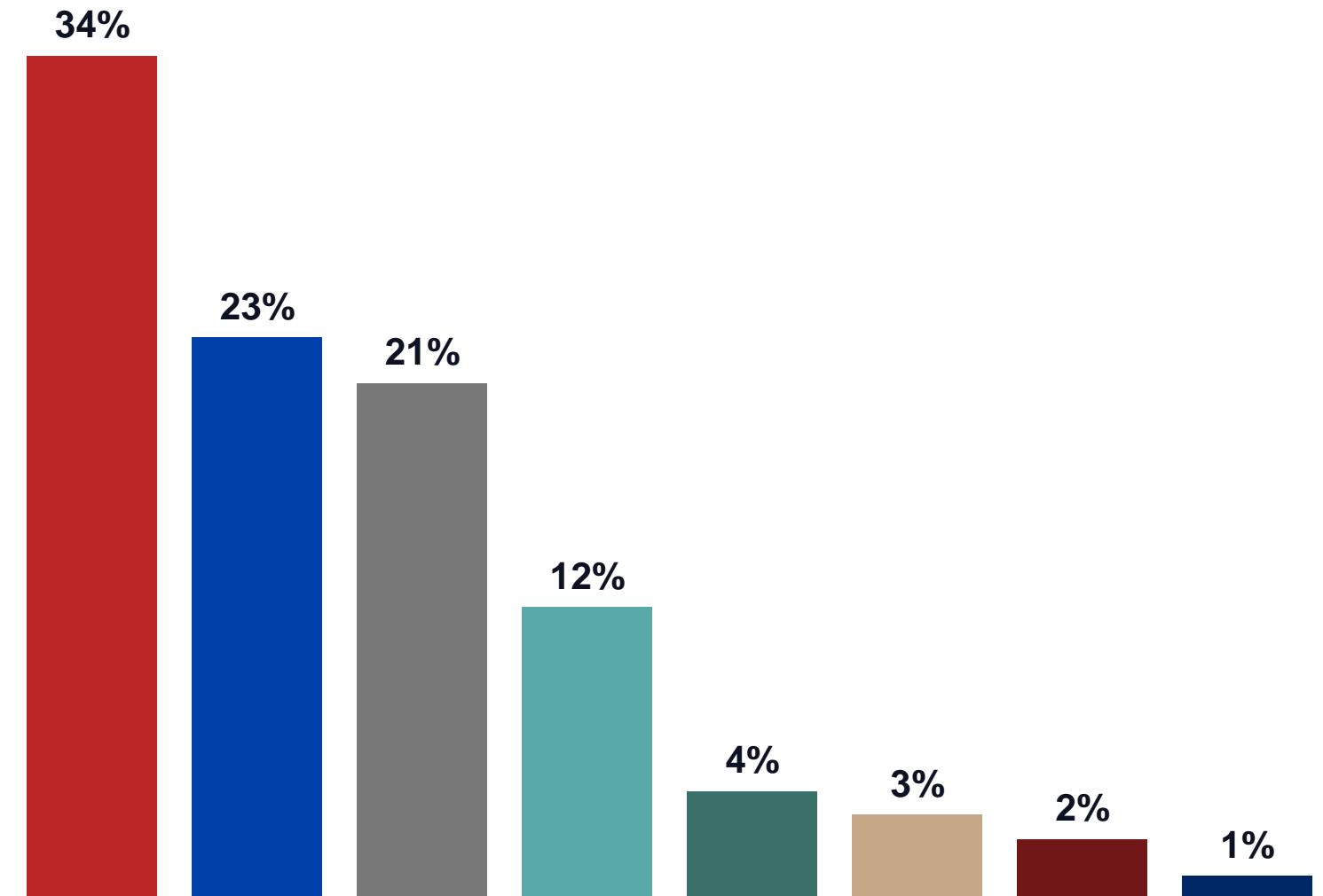
Internet activities which spend most of time (% of aged 15-65 internet used PWD population)

■ Social media ■ Chatting ■ News ■ Education
■ Entertainment ■ Work related ■ Job/work search



Internet activities which most useful (% of aged 15-65 PWD internet users population)

■ Chatting ■ Social media ■ News ■ Entertainment
■ Work related ■ Educational ■ Job/work search ■ Other



Q: When you use the internet, what do you spend most time on?

No. of respondents 52*

Q: When you use the internet what do you find most useful?

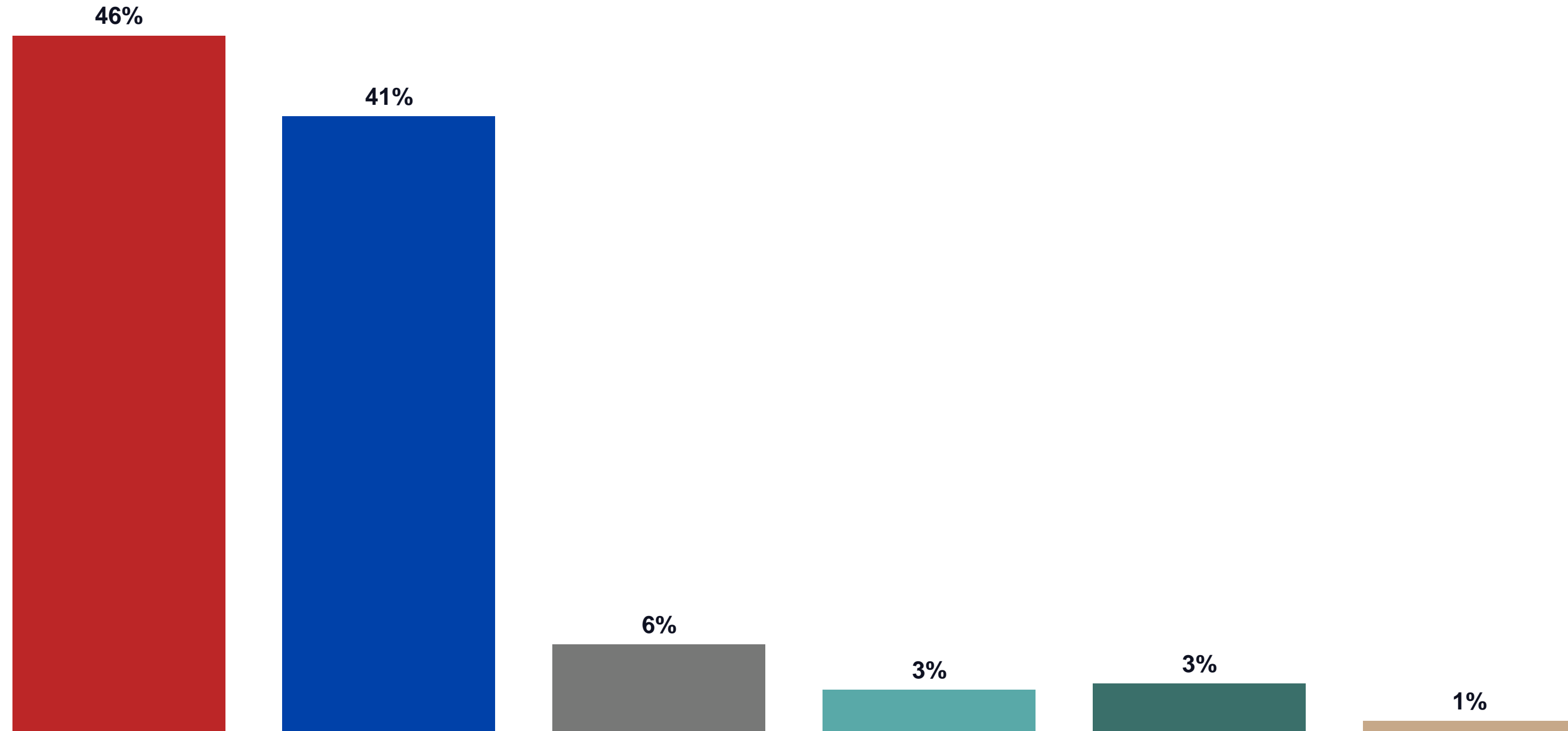
47 No. of respondents 52*

* Low base

Data cost main reason for not using Internet

Reasons of not using Internet (% of all 15-65 PWD internet user population)

■ No limitation ■ Data cost ■ Lack of time ■ Dificult to use ■ No internet in the area ■ Not allowed



Q: What is the main limitation of using internet?

No. of respondents 52

48

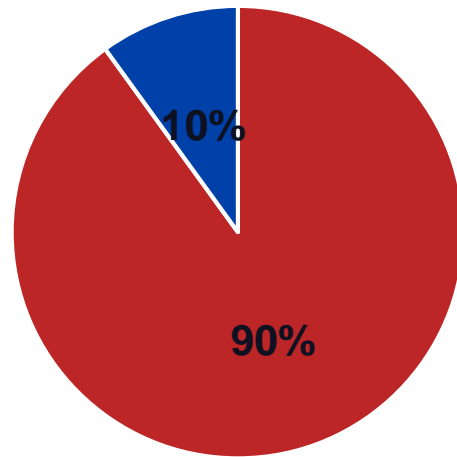
* Low base

SOCIAL MEDIA

Age, gender and real name shared by many

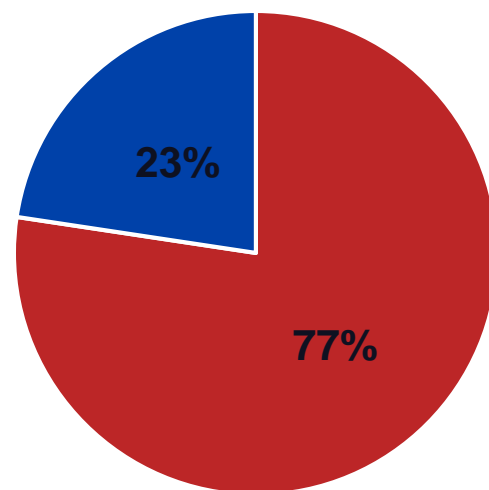
Social media usage (% of aged 15-65 PWD population)

■ No ■ Yes

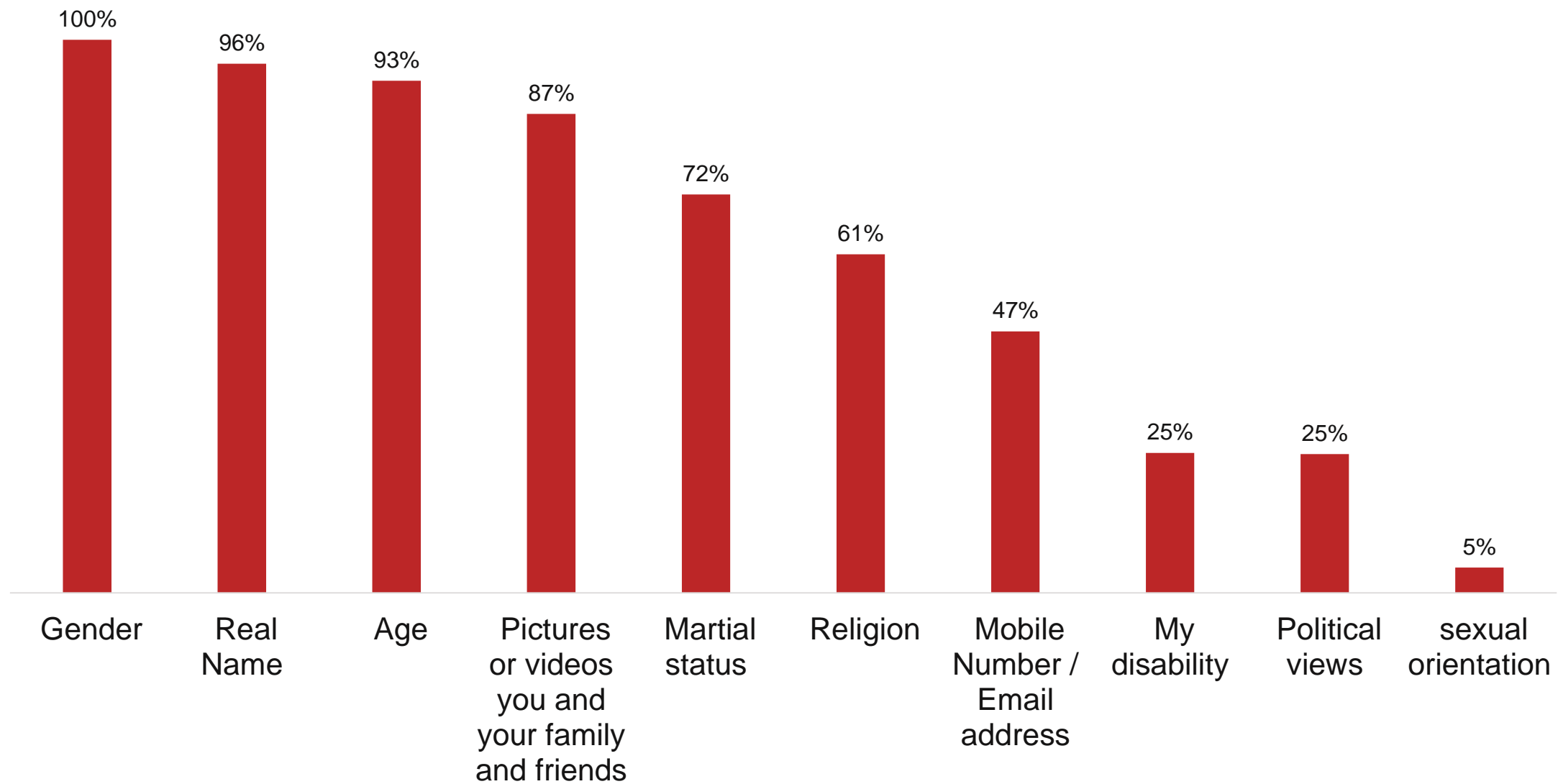


Way of using social media (% of aged 15-65 PWD social media use population)

■ Independently ■ With help



Information share on social media (% of aged 15-65 PWD social media use population)



Q: Do you use social media like facebook, whatsapp, twitter etc,?

All respondents 400

Q: How do you use social media?

Social media users 48*

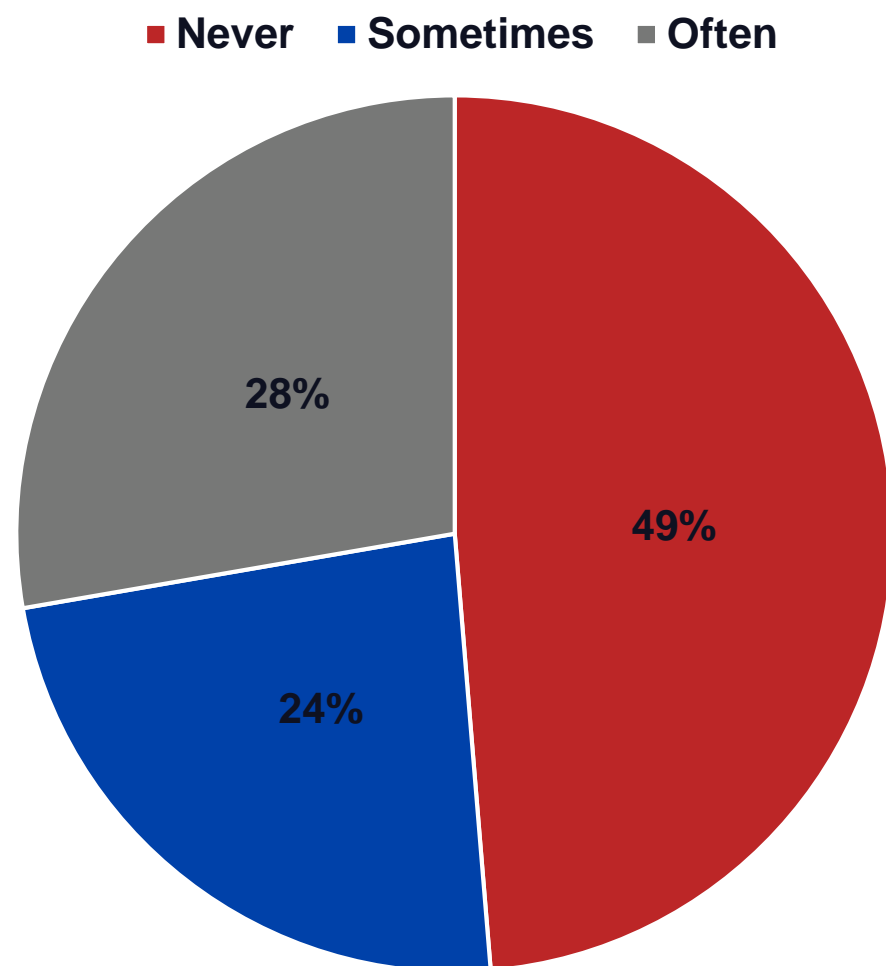
Q: What information do you share on social media?

Social media users 48*

* Low base

Social media used for texting and calling

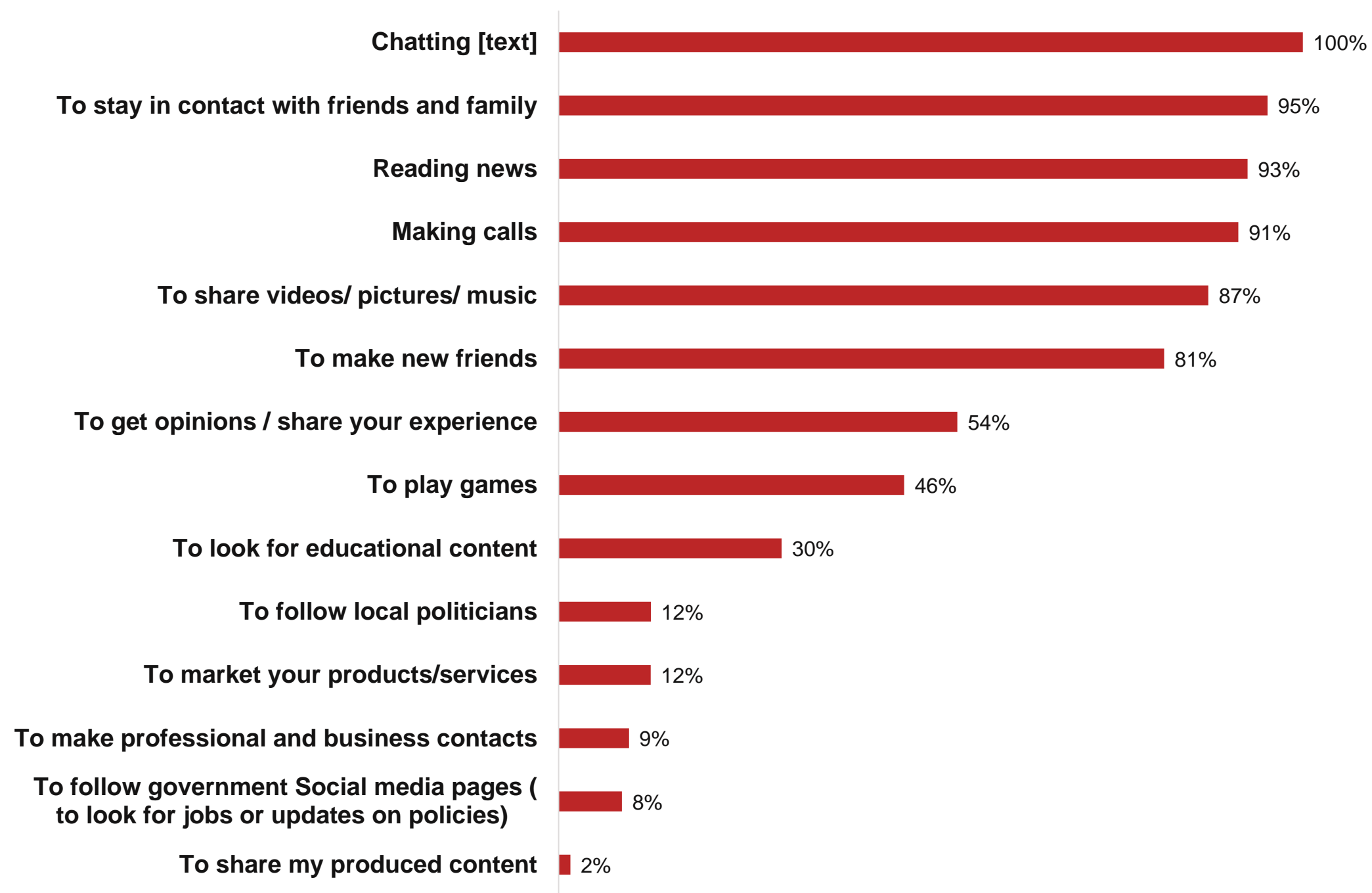
Preference of interacting people on social media than face to face (% of aged 15-65 PWD social media users population)



Q: Do you prefer to interact with people on social networking sites rather than face to face?

Social media users 48*

Use of social media (% of aged 15-65 PWD social media use population)



Q: What do you use social media for?

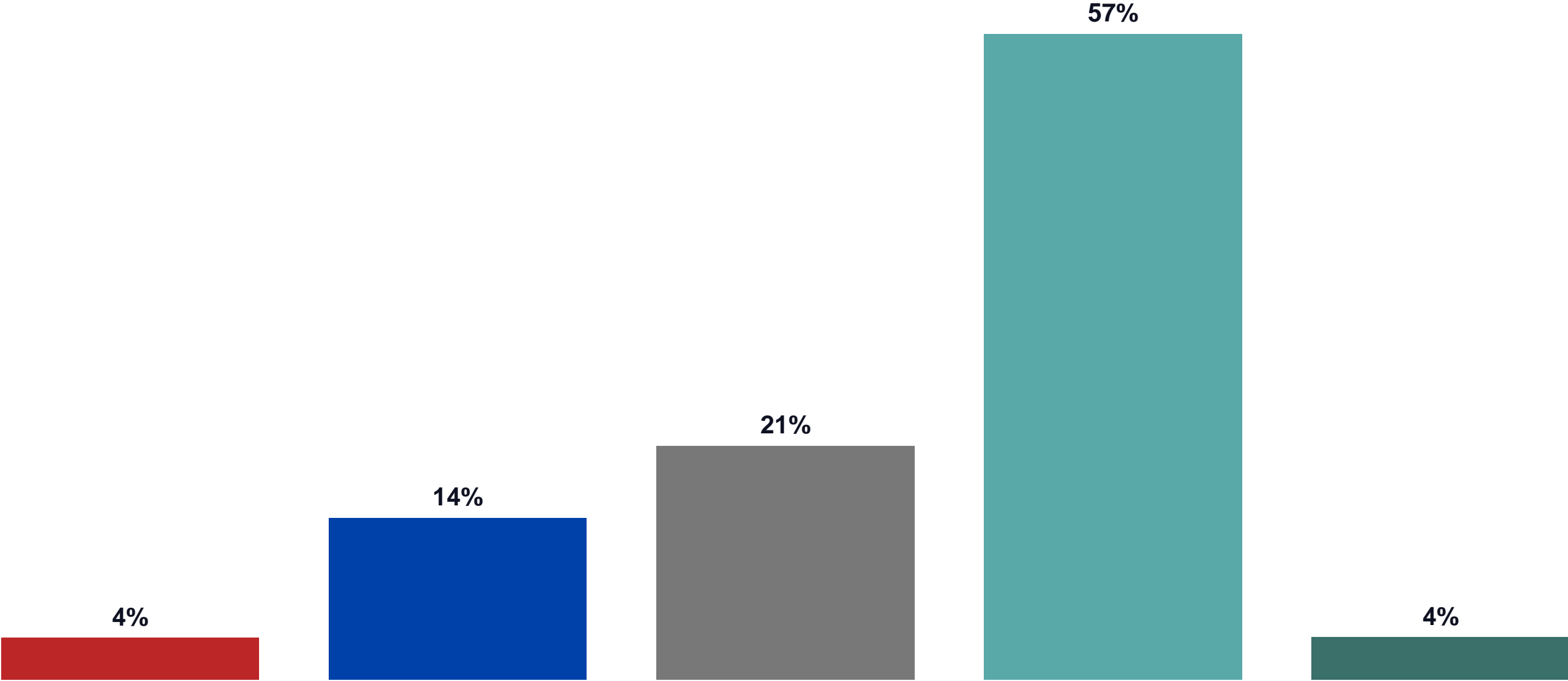
Social media users 48*

* Low base

Social media news considered trustworthy

Trust on social media news (% of aged 15-65 social media users PWD population)

■ Strongly do not trust ■ Do not trust ■ Do not know ■ Trust ■ Strongly trust



Q: Can you trust news you read on social media?

Social media users 48*

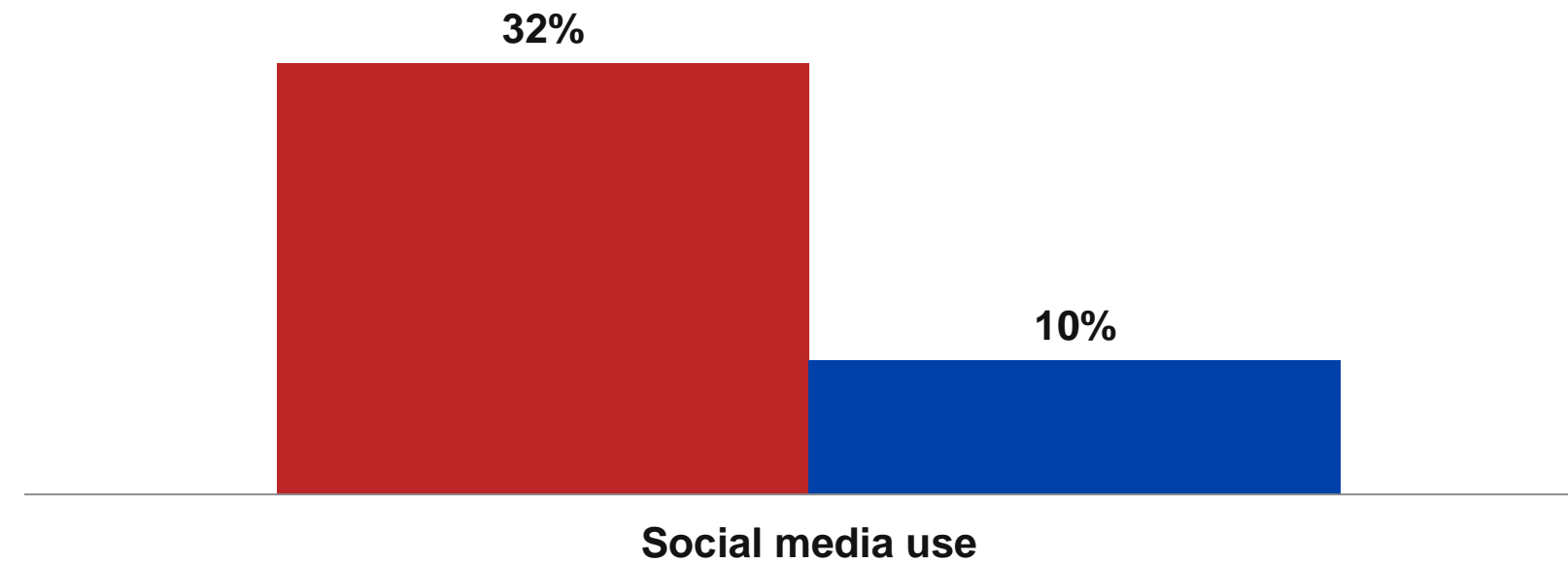
52

* Low base

PWD social media use less than national use levels

Social media use (% of aged 15-65 population/% of aged 15-65 PWD population)

■ Nepal ■ Nepal PWD

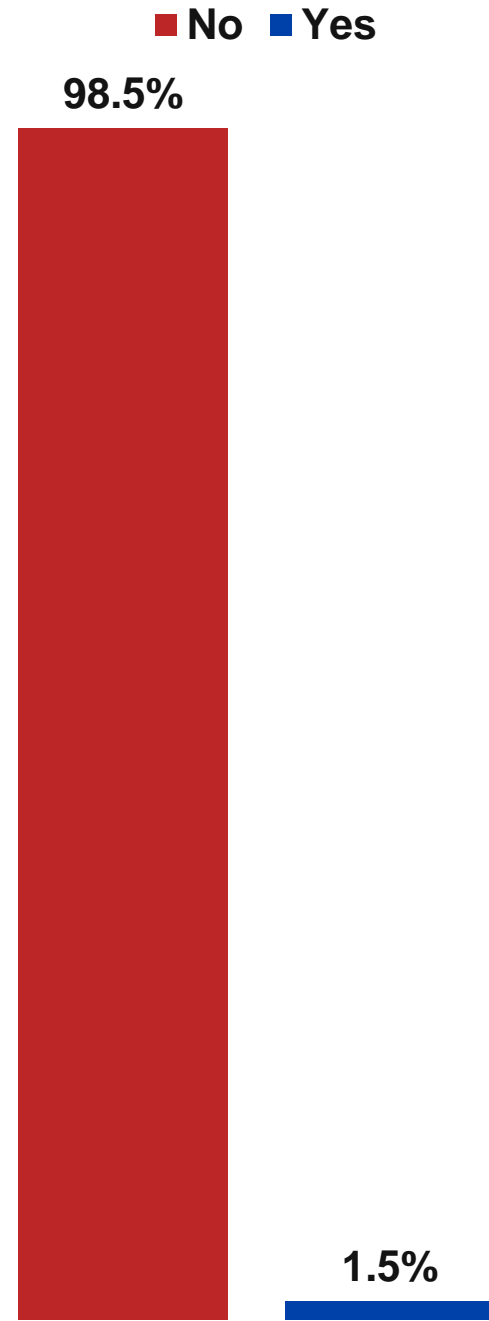


| Base | Nepal (national sample) | PWD |
|-----------------|-------------------------|-----|
| All respondents | 2,008 | 400 |

COMPUTER USE

Majority of computer users need assistance

Ownership of personal computer (% of aged 15-65 PWD population)



Q: Do you own a personal computer?

All respondents 400

Frequency of using a computer (% of aged 15-65 PWD population)

■ Never ■ Every now and then ■ Daily ■ Hourly

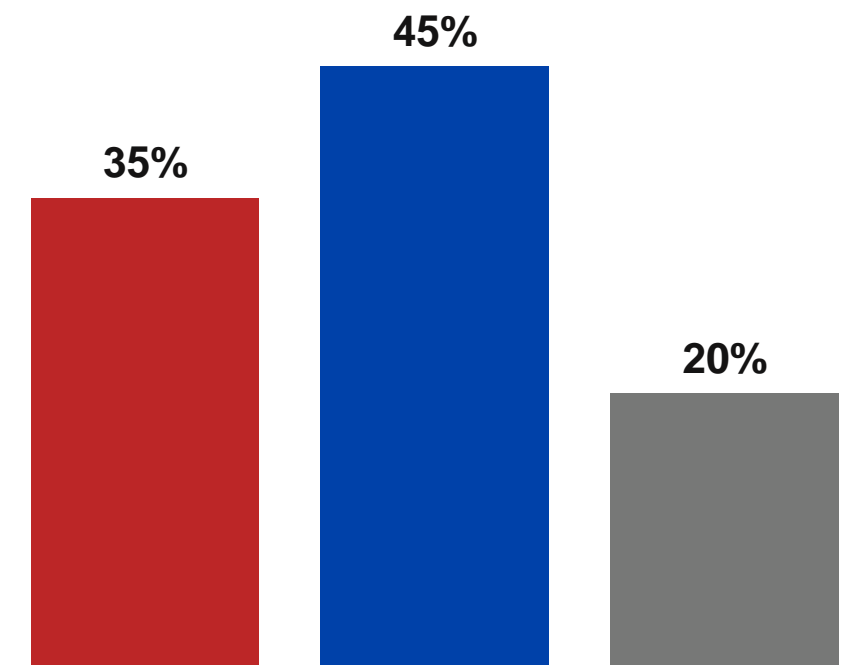


Q: How often do you use a computer?

All respondents 400 55

Level of comfort using a computer (% of aged 15-65 computer used PWD population)

■ Can use independently ■ Can use with a little bit of assistance ■ Can use with moderate level of assistance



Q: What is your level of comfort when using computers?

Computer users 14*

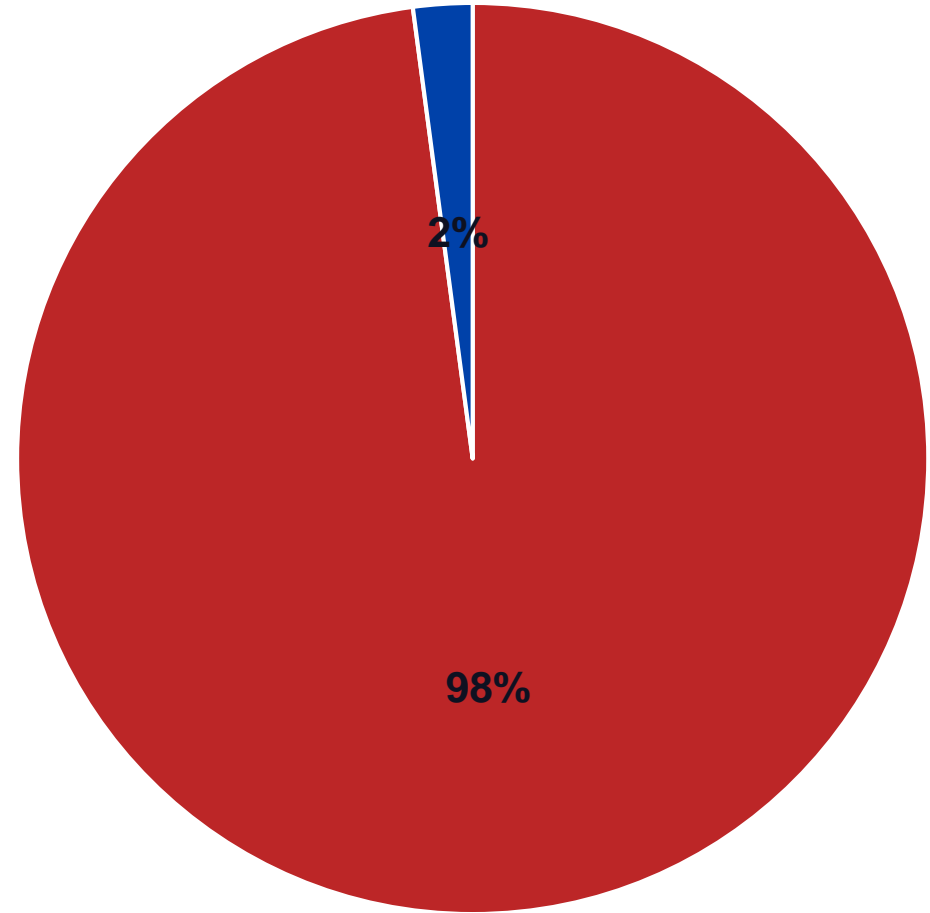
* Base is critically low

ONLINE PLATFORMS

Low awareness of online platforms

Awareness of online platforms (% of aged 15-65 internet use PWD population)

■ No ■ Yes



Q: Have you heard of these opportunities to buy/sell goods or services over the internet or apps?

Internet users 52*

57

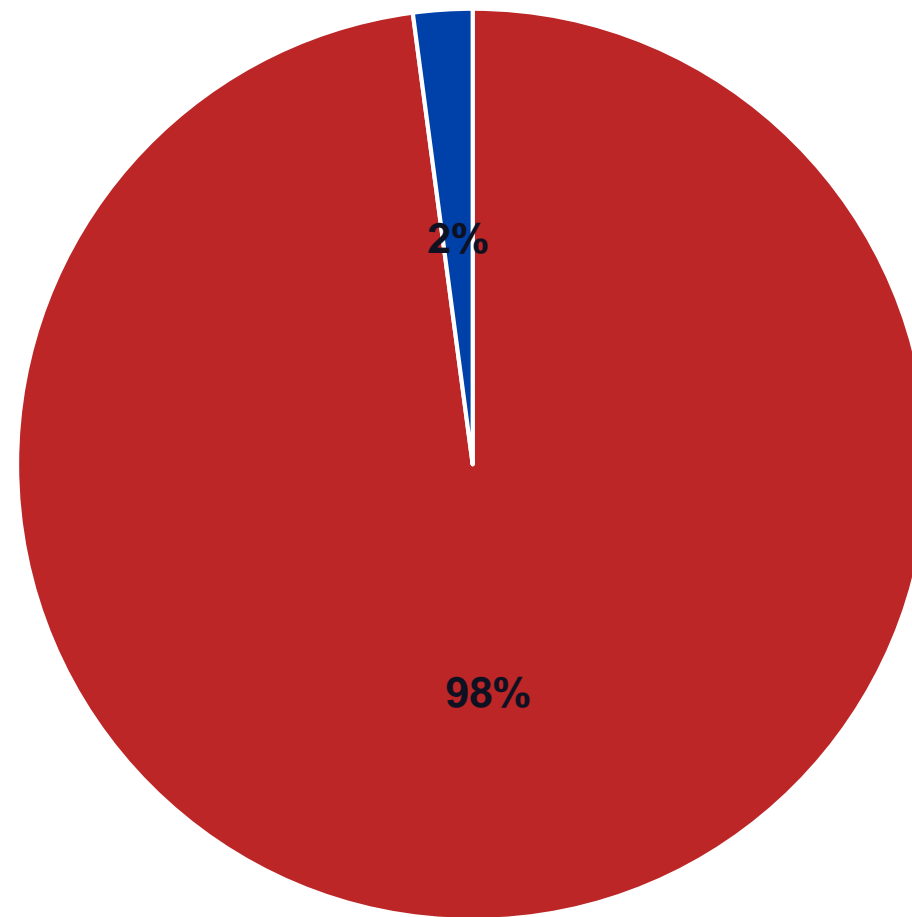
* Low base

e-GOVERNMENT

Government website access is low

Access to government websites (% of aged 15-65 internet used PWD population)

■ No ■ Yes



Q: Do you use the internet to access government websites?

Internet users 52*

59

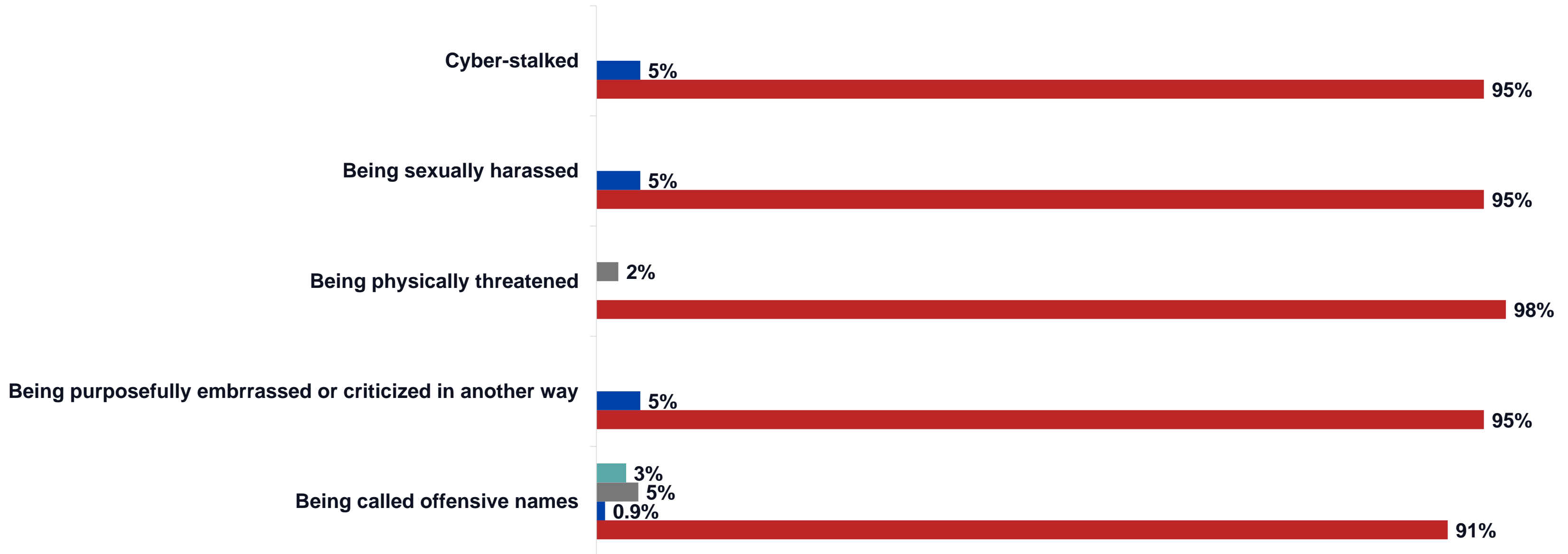
* Low base

ONLINE HARASSMENT

Minimum exposure to online harassment

Witnessed or experienced online harassment (% of all aged 15-65 internet used PWD population)

■ Witnessed and experienced ■ Experienced only ■ Witnessed only ■ No

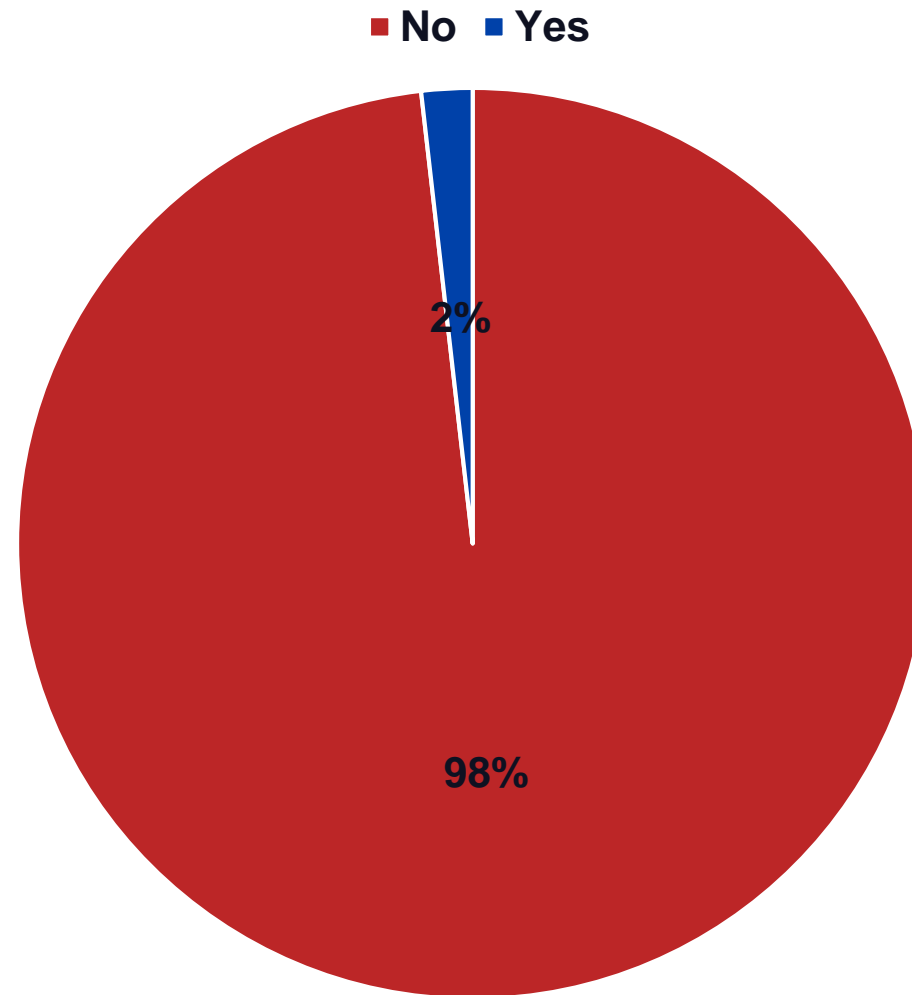


Q: Have you witnessed or personally experienced Cyber-stalked/ being sexually harassed/ being physically threatened/ being purposefully embarrassed or criticized in another way/ being called offensive names?

CYBER SECURITY

Minimum incidents of devices or accounts ever been taken over by someone else, either through the Internet or in person

Experiences of internet hacking (% of aged 15-65 internet used PWD population)



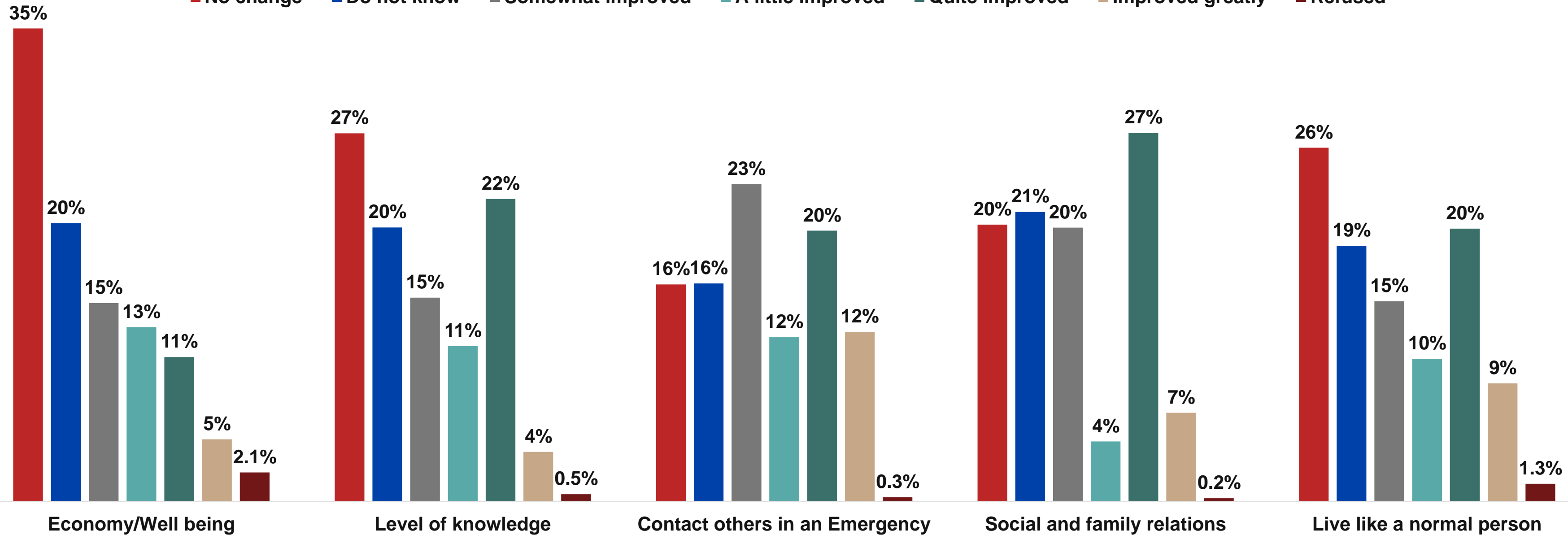
Q: To your knowledge have any of your devices or accounts ever been taken over by someone else, either through the internet or in person?

PERCEIVED IMPACT OF ICT

The greatest impact is ability to manage social & family relations & contact others in an emergency

Perception on the impact of ICT to the lives of PWD (% of aged 15-65 PWD population who have used a mobile phone in the last 3 months)

■ No change
 ■ Do not know
 ■ Somewhat improved
 ■ A little improved
 ■ Quite improved
 ■ Improved greatly
 ■ Refused



Q 01: To what extend the usage of mobile phone has improved your finance/economy or wellbeing?

Q 02: To what extend the usage of mobile phone has improved your level of knowledge?

Q 03: To what extend the usage of mobile phone has improved your ability to contact others in an emergency?

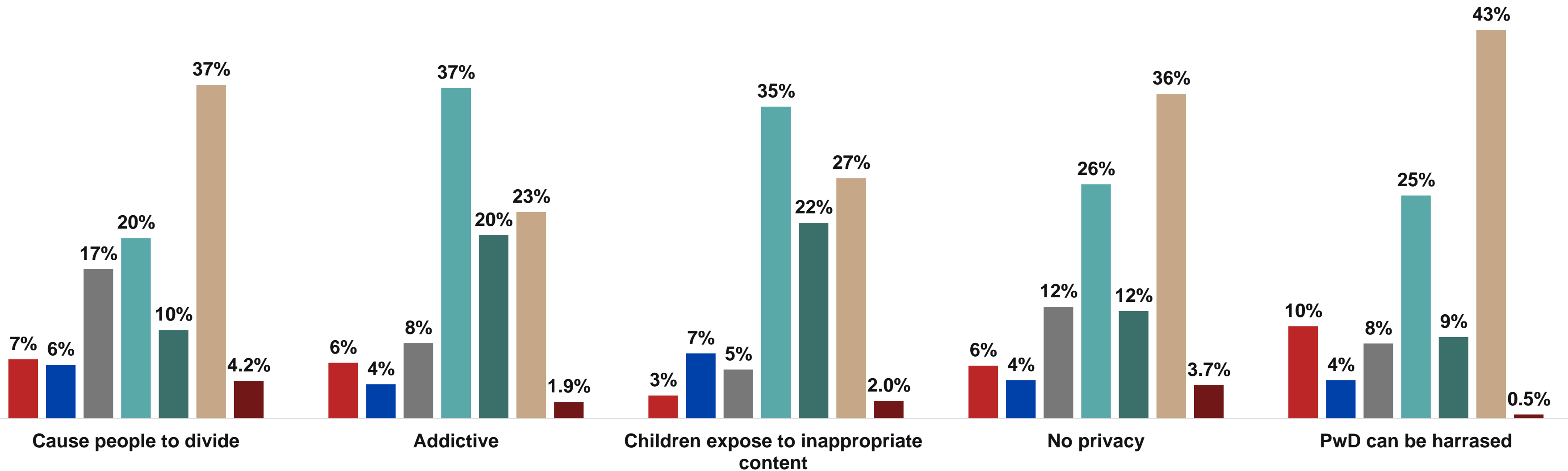
Q 04: To what extend the usage of mobile phone has improved your social and family relations?

Q 05: To what extend the usage of mobile phone has improved your life to live like a normal person?

Addiction and negative effects on children are concerns

Perception on the impact of ICT on the PWD (% 15-65 PWD population who have used a mobile phone in the last 3 months)

■ Not at all agree
 ■ Somewhat disagree
 ■ Neither agree/disagree
 ■ Somewhat agree
 ■ Strongly agree
 ■ Don't know
 ■ Refuse



- Q 01: To what extend the usage of mobile phone/internet has divided people socially, politically etc.?
- Q 02: To what extend the usage of mobile phone/internet is addictive?
- Q 03: To what extend the usage of mobile phone can expose children to inappropriate content?
- Q 04: To what extend the usage of mobile phone/internet expose private information to others?
- Q 05: To what extend the usage of mobile phone/internet makes PwD harassed or discriminated by others?

THANK YOU

AFTER ACCESS

