

Digital Health Seeking

Digital Personas

Decodis' Final Analysis and Insights Deck for:

- Urban Kenya
- Rural Kenya
- Lagos
- Urban Northern Nigeria
- Rural Northern Nigeria
- Urban Senegal
- Rural Senega



Screenshot of Kenyan Dr. Joyce's TikTok content

Key Insights about Health (1/2)

With respect to how women viewed digital and health information-seeking, we found several important differences between the three countries.

- More women in Kenya are willing to look online for health information than in Nigeria or Senegal. In urban and rural Kenya, only 11% and 16% of women, respectively, said they would *not* look for health information online.
- In Nigeria, the same figures are 34% and 33%, respectively, for Lagos and Urban Northern Nigeria and 38% for rural Northern Nigeria.
- In Senegal, we asked the question differently – not what health information would women look for but what do they look for. 33% in urban Senegal and 57% in rural Senegal say they do *not* look for health information online.

Second, there were also important differences in the types of information women in the three countries would look for online.

- Women in Kenya speak very differently about the type of information they would look for online compared to those in Nigeria and Senegal. In Kenya, women spoke about informing themselves about staying healthy and finding out more about diseases that they have heard of and think they should be more informed.
- In contrast, women in Nigeria and Senegal speak in a more diagnostic way about how to diagnose symptoms for themselves and their children as well as what medications they should take. In particular, Nigerian women who said they would look for health information online spoke about using it to replace health care providers.

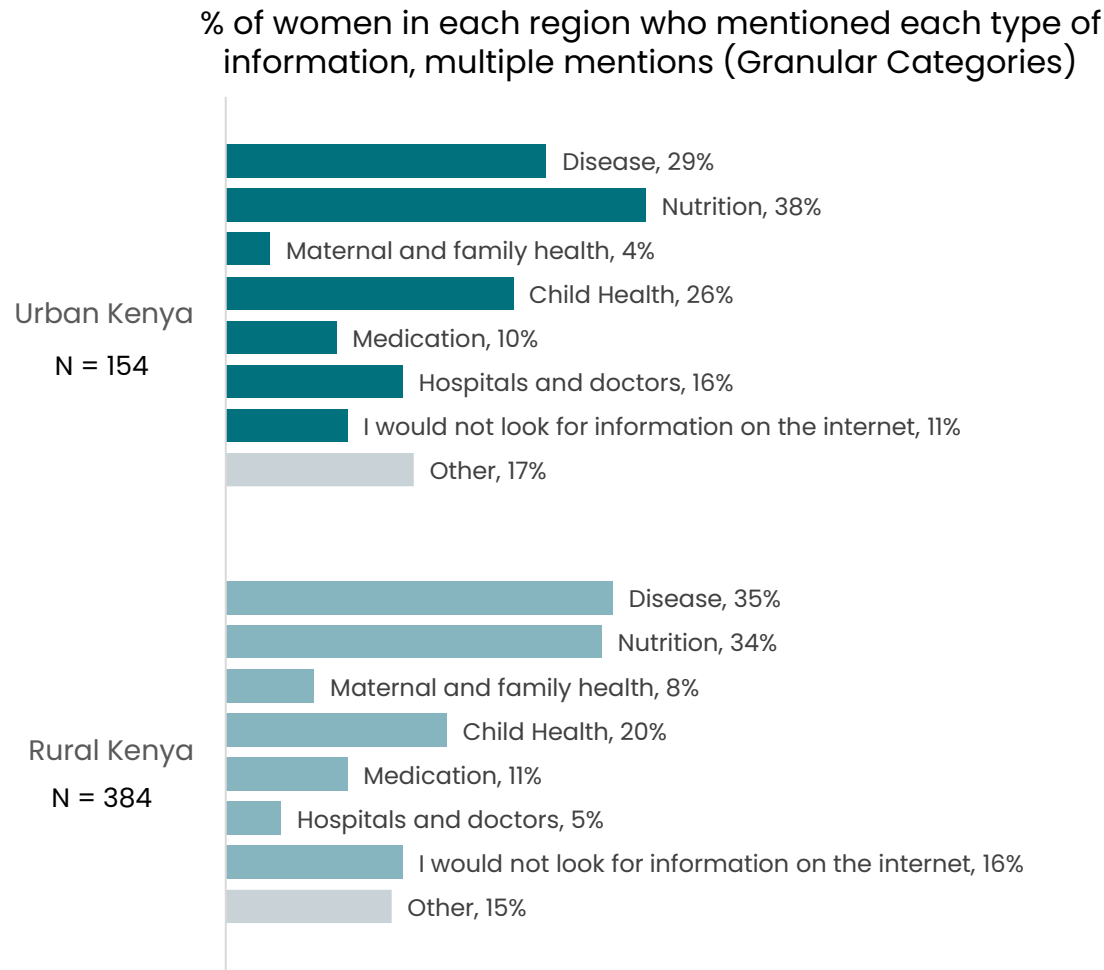
Key Insights about Health (2/2)

Third, we asked what women would find beneficial about seeking health information online and they described what they felt in an open-ended way.

- From women's responses we inductively derived four main concepts. The reasons they would look for information online are because it is Cheap, Convenient, Private and Empowering. Aligned with the expressions women used to describe these benefits, we also did linguistic analysis to deepen our understanding – did women mention these benefits indifferently and in passing or did they speak about them enthusiastically and at length?
- Most Nigerian and Kenyan women spoke about Convenience.
- In Kenya, most women (over 50%) spoke about notions of Convenience. Considering that women in Kenya focused on using the internet to inform rather than diagnose themselves (see point on previous slide), it makes sense that being able to learn whenever they like, at their own convenience, makes sense.
- In Nigeria, on the other hand, notions of Empowerment was referred to as often as Convenience. In Lagos and Urban Northern Nigeria Reliability was spoken of with more enthusiasm than Convenience.
- Likewise, in Senegal, notions of Empowerment were spoken of, and with the most enthusiasm, by highest proportion of women in urban areas.
- What did women mean by "Empowerment"? Women spoke often about being able to compare online "doctors", judging how many followers they have, how many other women had made comments and how much they felt the information was relevant to them.
- In sum, women in Nigeria and Senegal both look to the internet to diagnose and medicate themselves. **Whether they are getting bad medical advice or not, they value being empowered in their health decisions.**

THE BOTTOM LINE: Women in Kenya are very comfortable seeking health information online to understand health issues, and therefore value Convenience. Women in Nigeria and Senegal are less comfortable seeking health information online and are seeking to diagnose health issues. They feel getting information online is more EMPOWERING than seeing a health care provider.

Insights – Kenya: If women were to look for health information online, what would they look for?



Note: This percentage is taken out of responses which were categorized. Some responses did not fall into a category, and some participants did not respond.

Only a small percentage of women in Kenya say they would not look for information online.

Mostly women talked about looking for general information as opposed to a diagnoses of symptoms or what type of medicine they should take for an ailment.

Women in Kenya spoke extensive about finding information that they felt they should know to keep themselves and their children healthy. They wanted to know what to eat for specific conditions. They wanted to know what to feed their children. They wanted to know what disease names mean because they had heard about them and felt they should know.

In other words, Kenyan women spoke about finding information in a proactive way – for their own knowledge and health. **For when they needed a diagnosis or medicine, they would go to see a health care provider.**

Categories

Hospitals and Doctors: Information about HCPs, e.g. location, which are available, or contact information.

Medication: Information about medication mostly about medication side effects or what it is for.

Child Health: Information related to children's health including ailments, treatments or other information.

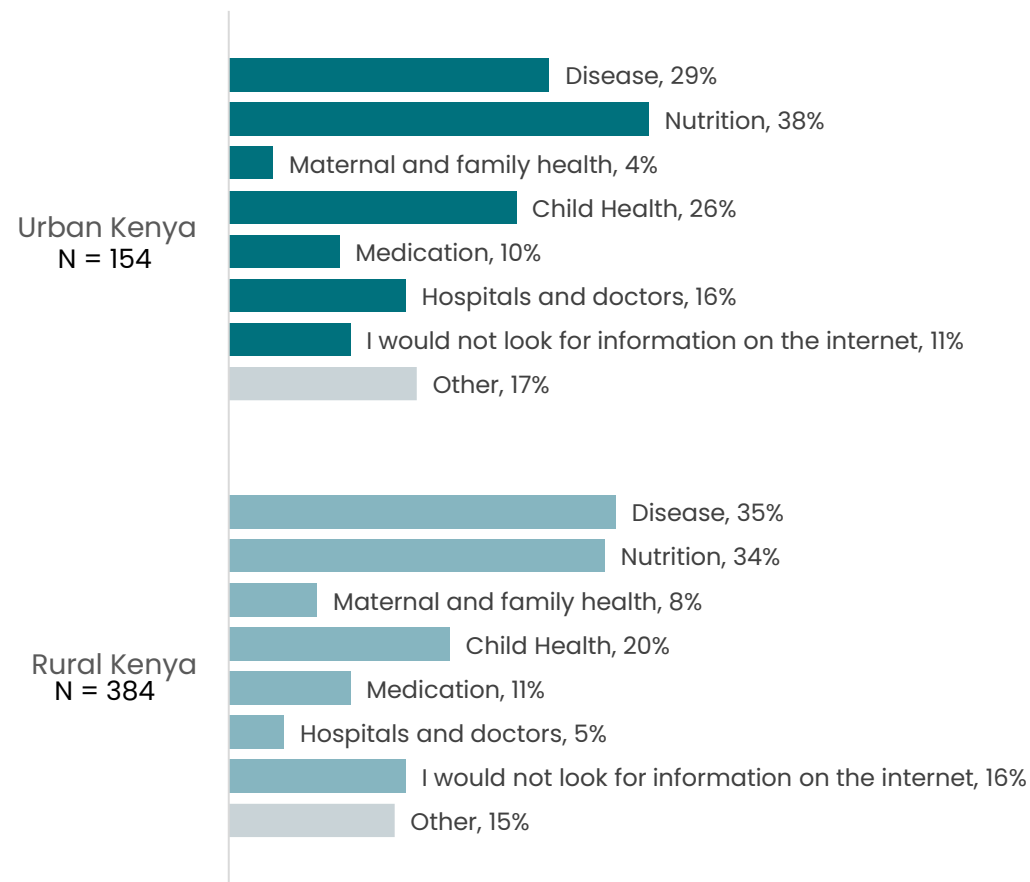
Maternal and Family Health: Information such as pre/postnatal health, women's health, or family planning.

Nutrition: Information on food, nutrition, and healthy living.

Disease: Information about diseases, mostly for their knowledge and prevention.

Sample Ns– Kenya: If women were to look for health information online, what would they look for?

% of women in each region who mentioned each type of information, multiple mentions (Granular Categories)



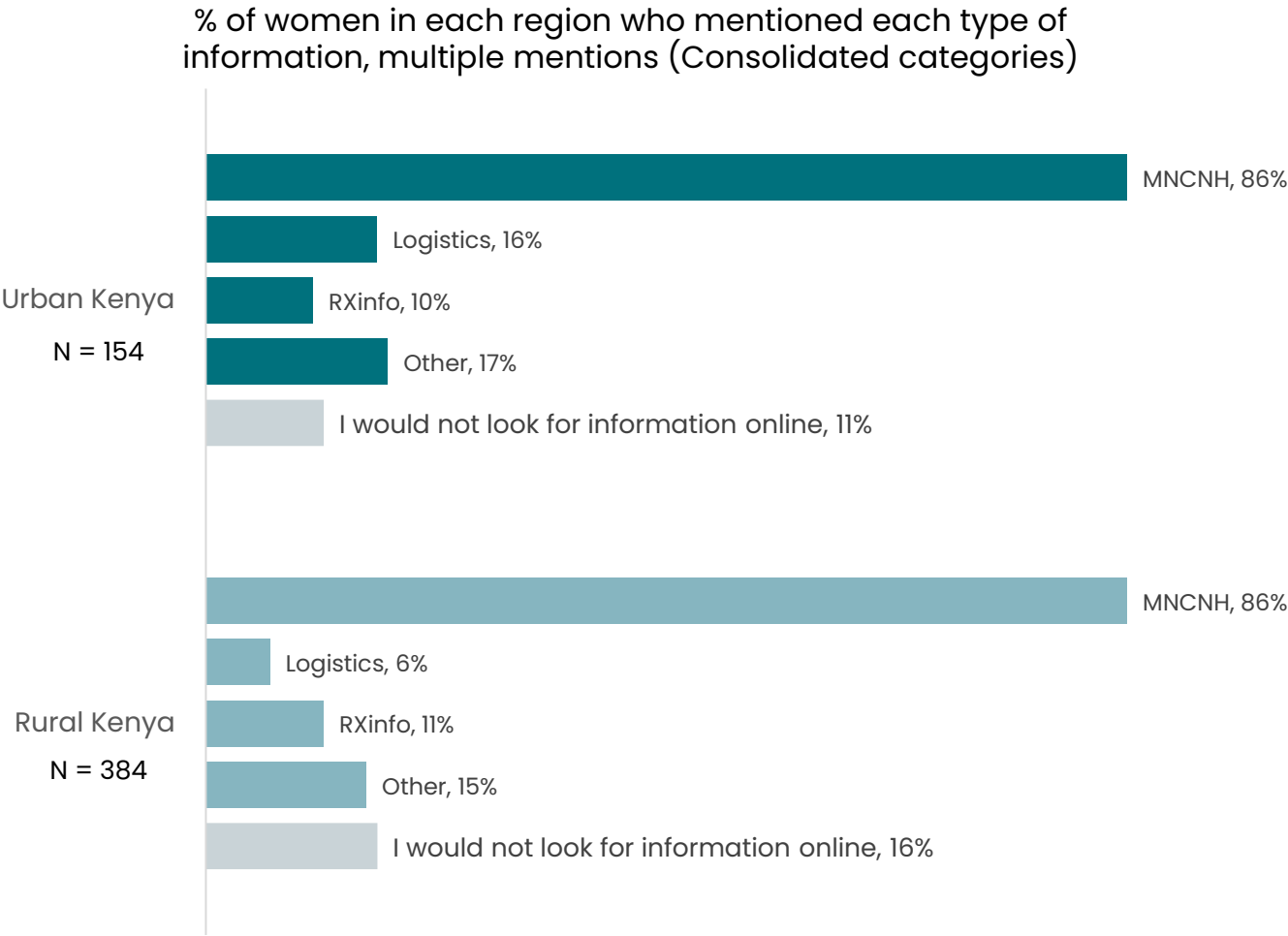
Note: This percentage is taken out of responses which were categorized. Some responses did not fall into a category, and some participants did not respond.

Context: Question asked as part of a skit about a woman who debated whether to look online for health information

- What kinds of health information would you be open to looking for on the internet? **Open-ended response.**

	Total sample	# of people who were asked	# of responses given	# of categorized responses
Urban Kenya	405	405	344	154
Rural Kenya	859	859	723	384

Insights – Kenya: If women were to look for health information online, what topics do they look for?

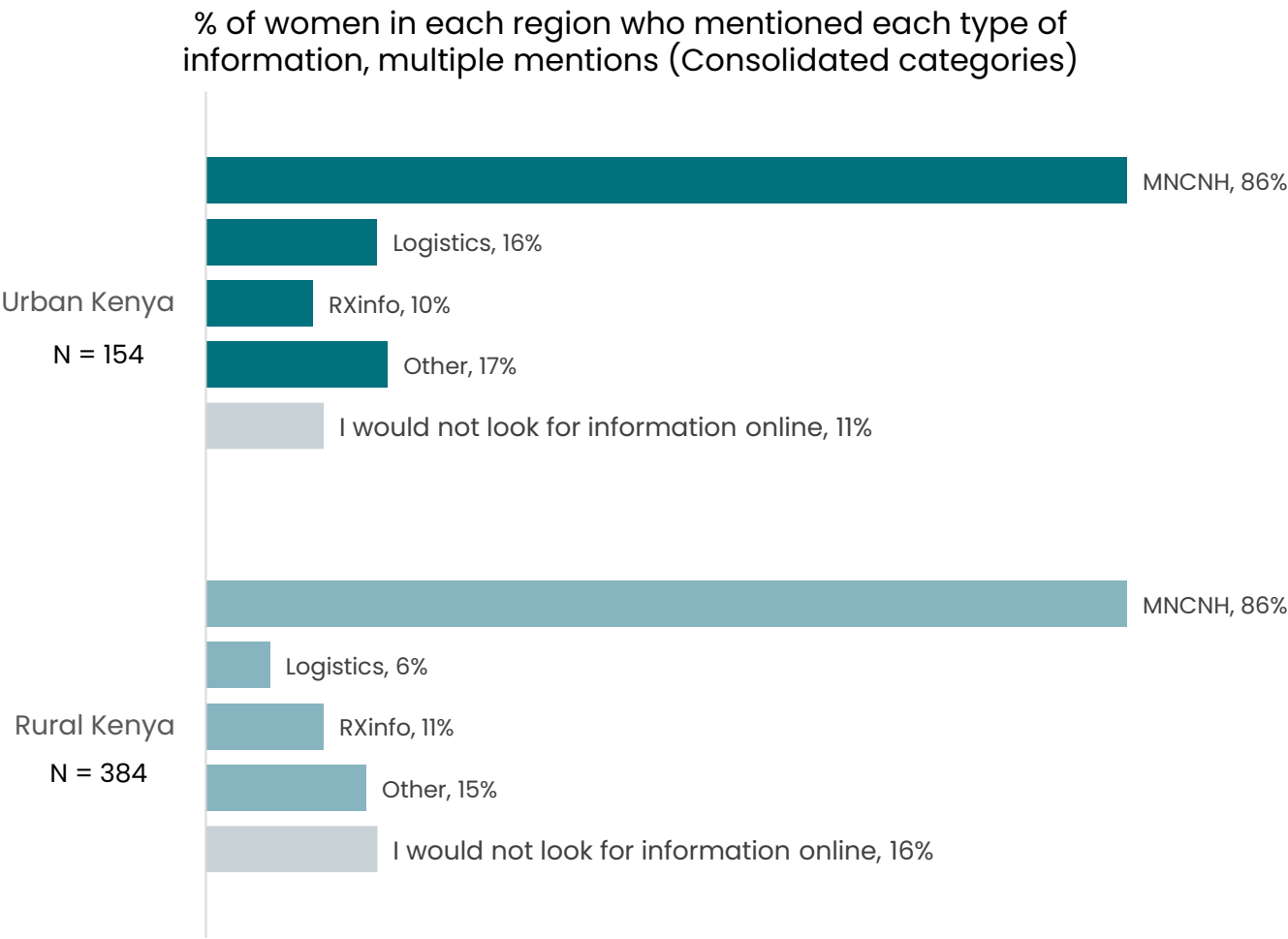


Note: This percentage is taken out of responses which were categorized. Some responses did not fall into a category, and some participants did not respond.

Women in Kenya spoke extensive about finding information that they felt they should know to keep themselves and their children healthy.

- Categories**
- Maternal, Newborn, Child Nutrition and Family Health:** Information related to maternal health, children's health, disease information, or nutrition.
 - Logistics:** Information about HCPs, e.g. location, which are available, or contact information.
 - RXinfo:** Information about medication mostly about medication side effects or what it is for.
 - Other:** Generic or unspecified reference to health information seeking.

Sample Ns: If women were to look for health information online, what topics would they look for?



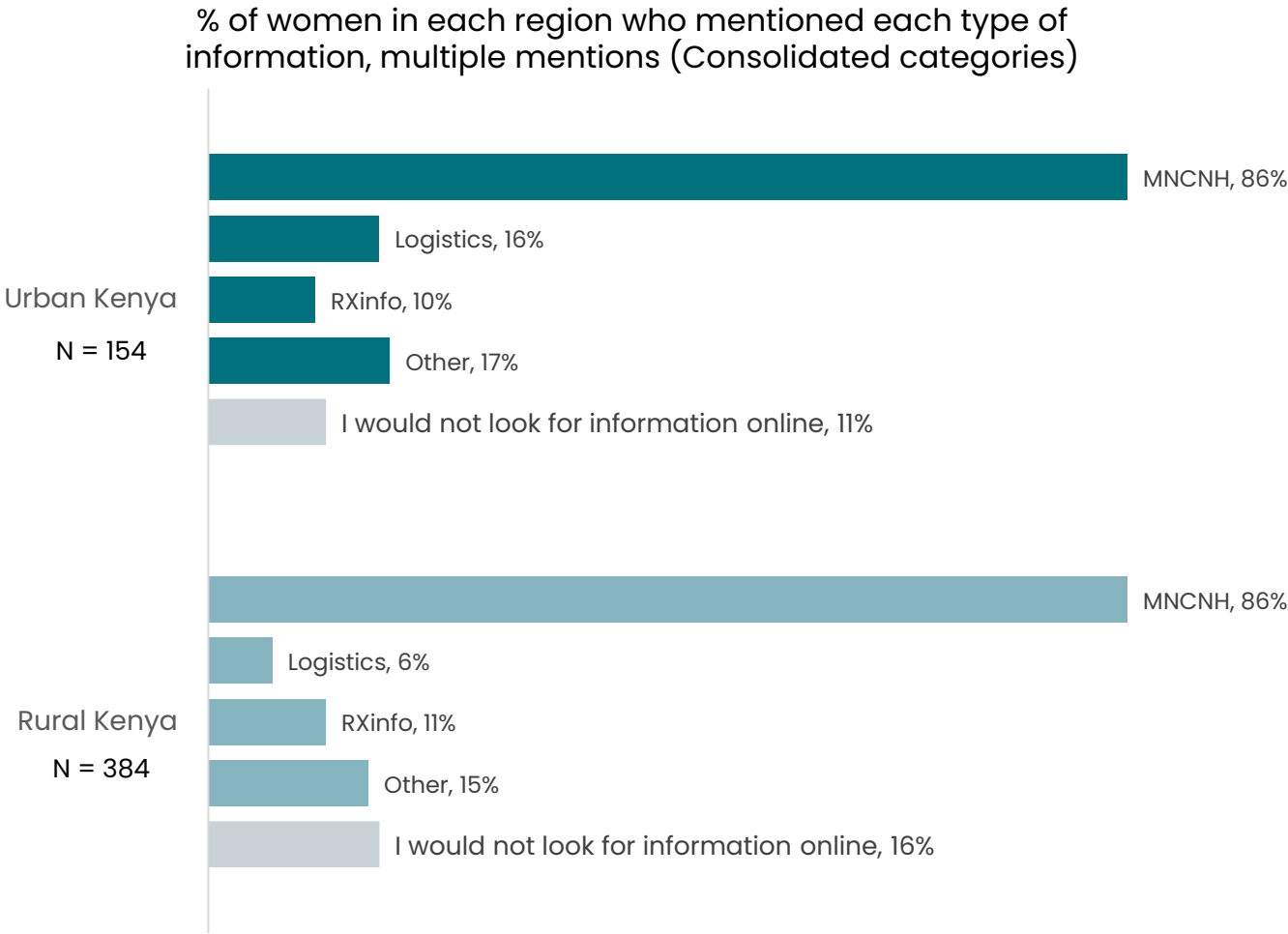
Note: This percentage is taken out of responses which were categorized. Some responses did not fall into a category, and some participants did not respond.

Context: Question asked as part of a skit about a woman who debated whether to look online for health information

- QC29 What kinds of health information would you be open to looking for on the internet? **Open-ended, asked to entire sample.**
- Note: Women in Kenya weren't as specific about what they looked for, therefore the number of women with categorized responses was significantly lower than the number of those who answered.

	Total sample	# of people who were asked	# of people who answered	# of people whose responses were categorized
Urban Kenya	405	405	317	154
Rural Kenya	859	859	673	384

Quote and audio– Kenya: If women were to look for health information online, what would they look for?

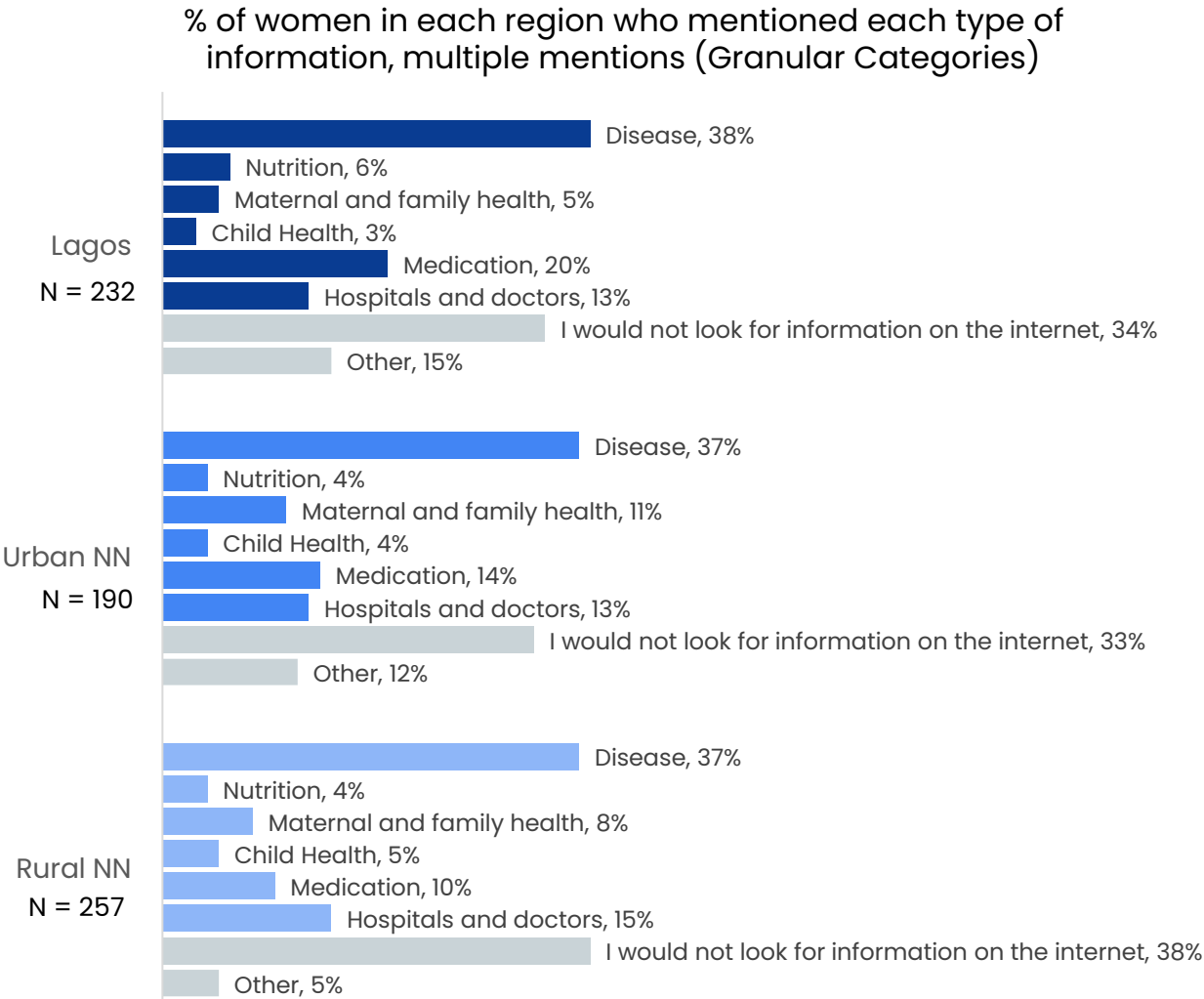


Sexually transmitted diseases that have emerged, sexually transmitted diseases that have emerged and how you treat them, diseases, diseases that are near me or that have occurred and how to protect yourself.

Urban Kenya, Swahili

Note: This percentage is taken out of responses which were categorized. Some responses did not fall into a category, and some participants did not respond.

Insights – Nigeria: If they were to look for health information online, what would they look for?



Note: This percentage is taken out of responses which were categorized. Some responses did not fall into a category, and some participants did not respond.

Women in Nigeria were very different from Kenya in the way they talked about what they would look for online.

First, roughly one-third (more in rural Northern Nigeria) said they would not look for information online at all.

Second, women most of all looked for information about disease, but in a very different way than in Kenya. Overall, women looked online for a diagnosis of their own symptoms or those of their children. They were looking for information online to get a diagnosis **instead** of going to a health care provider.

In Lagos, this also holds true for looking for medication online. Women spoke about finding the medicine that would treat their ailments, **instead** of seeing a health care provider.

Categories

Hospitals and Doctors: Information about HCPs, e.g. location, which are available, or contact information.

Medication: Information about medication, mostly about what to take to treat ailments.

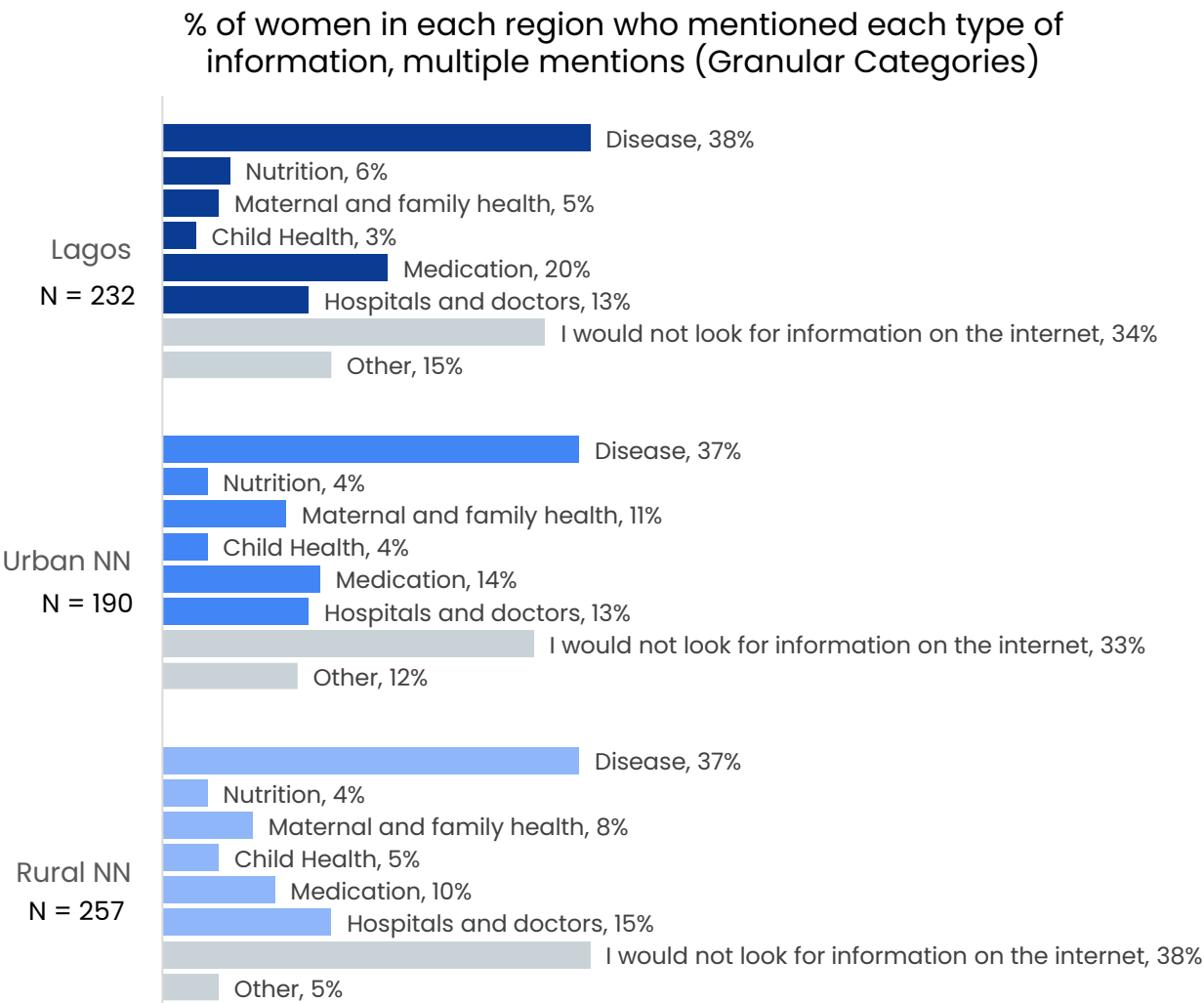
Child Health: Information related to children’s health including ailments, treatments or other information.

Maternal and Family Health: Information such as pre/postnatal health, women’s health, or family planning.

Nutrition: Information on food, nutrition, and healthy living.

Disease: Information about diseases, mostly their treatment or diagnosis.

Sample Ns – Nigeria: If they were to look for health information online, what would they look for?



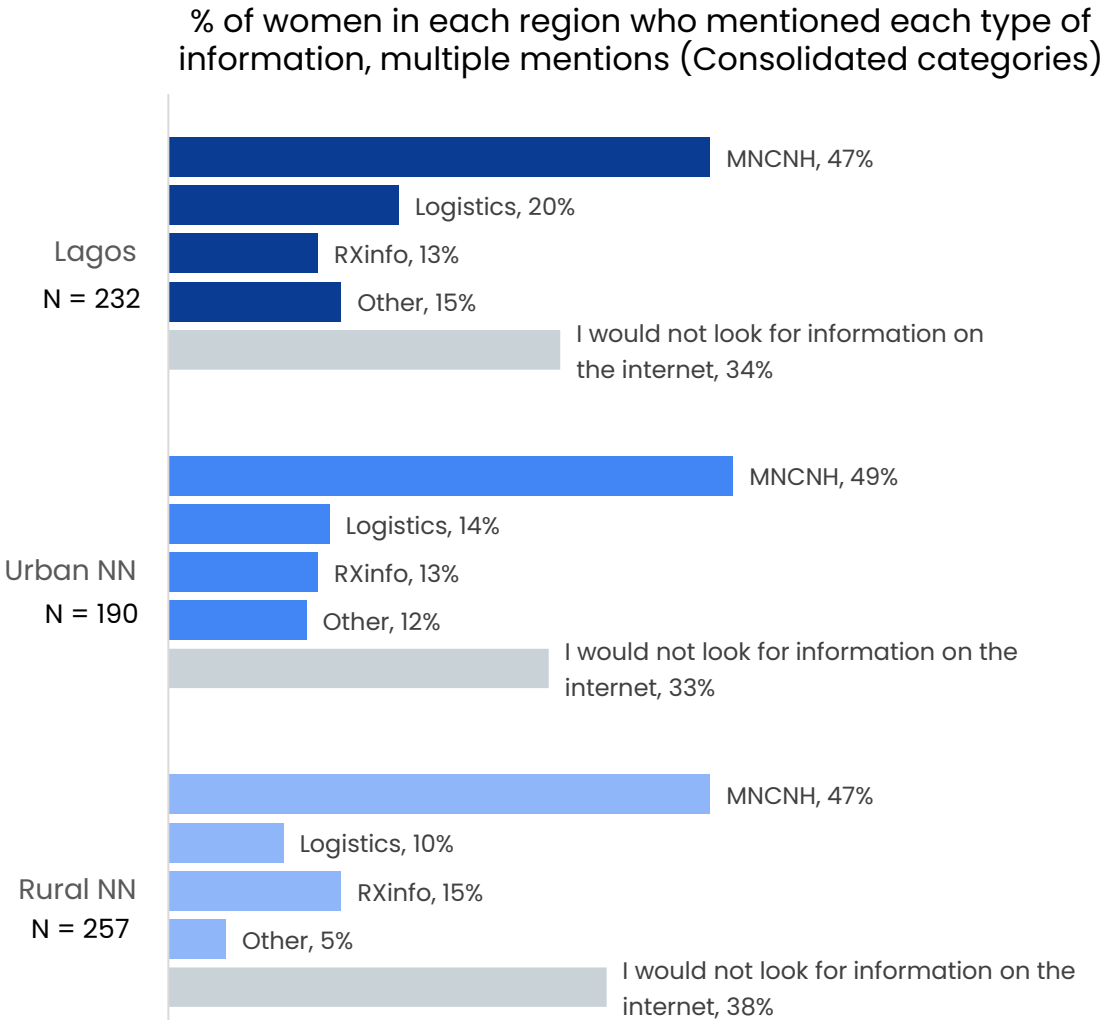
Note: This percentage is taken out of responses which were categorized. Some responses did not fall into a category, and some participants did not respond.

Context: Question asked as part of a skit about a woman who debated whether to look online for health information

- What kinds of health information would you be open to looking for on the internet?

	Total sample	# of people who were asked	# of responses given	# of categorized responses
Lagos	454	454	331	232
Urban NN	404	404	396	190
Rural NN	556	556	549	257

Insights – Nigeria: If they were to look for health information online, what would they look for?



Note: This percentage is taken out of responses which were categorized. Some responses did not fall into a category, and some participants did not respond.

Women in Nigeria also were mostly interested in topics relevant to them and their family but were more prone to wanting to find out about more practical things, like logistics and medicine.

Categories

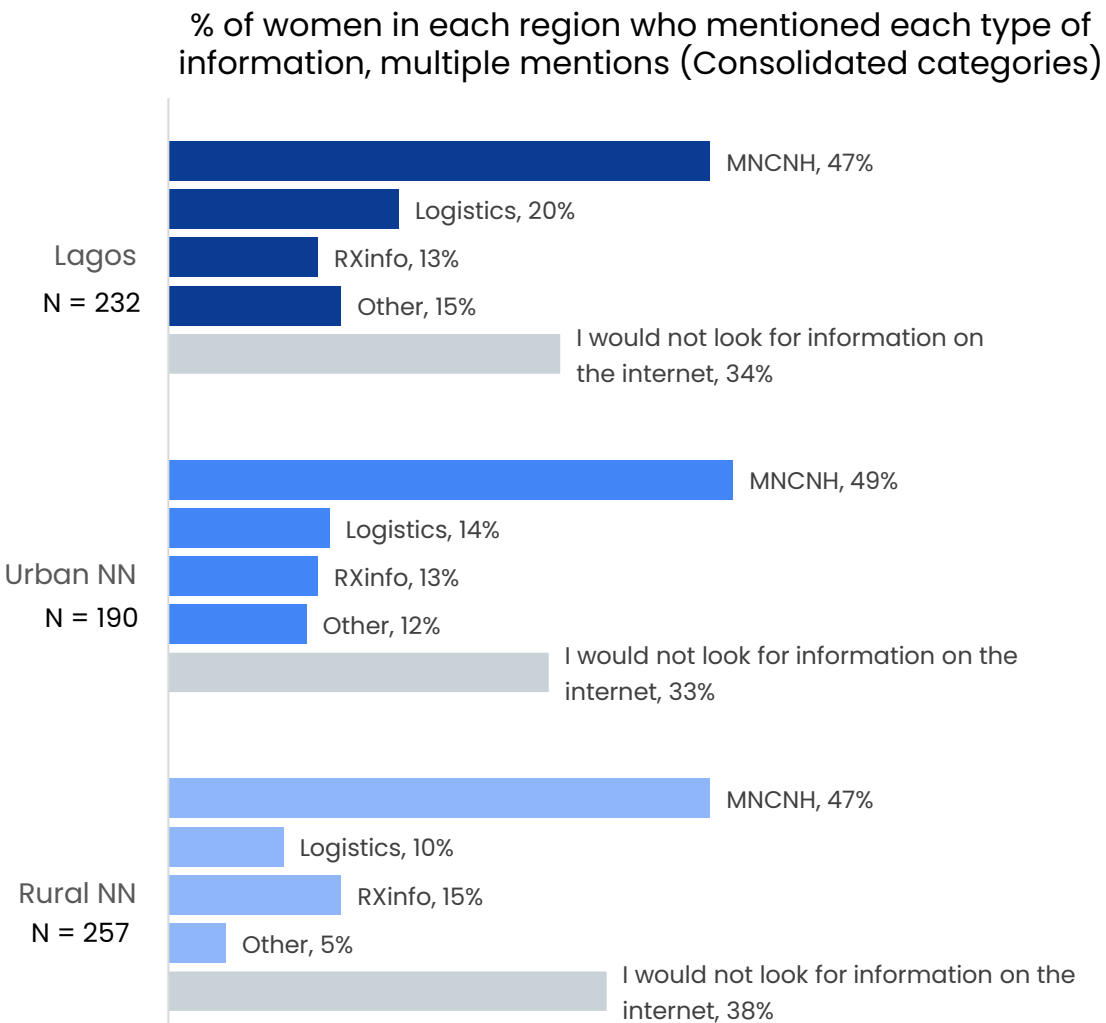
Maternal, Newborn, Child Nutrition and Family Health: Information related to maternal health, children’s health, disease information, or nutrition.

Logistics: Information about HCPs, e.g. location, which are available, or contact information.

RXinfo: Information about medication mostly about medication side effects or what it is for.

Other: Generic or unspecified reference to health information seeking.

Sample Ns – Nigeria: If they were to look for health information online, what would they look for?



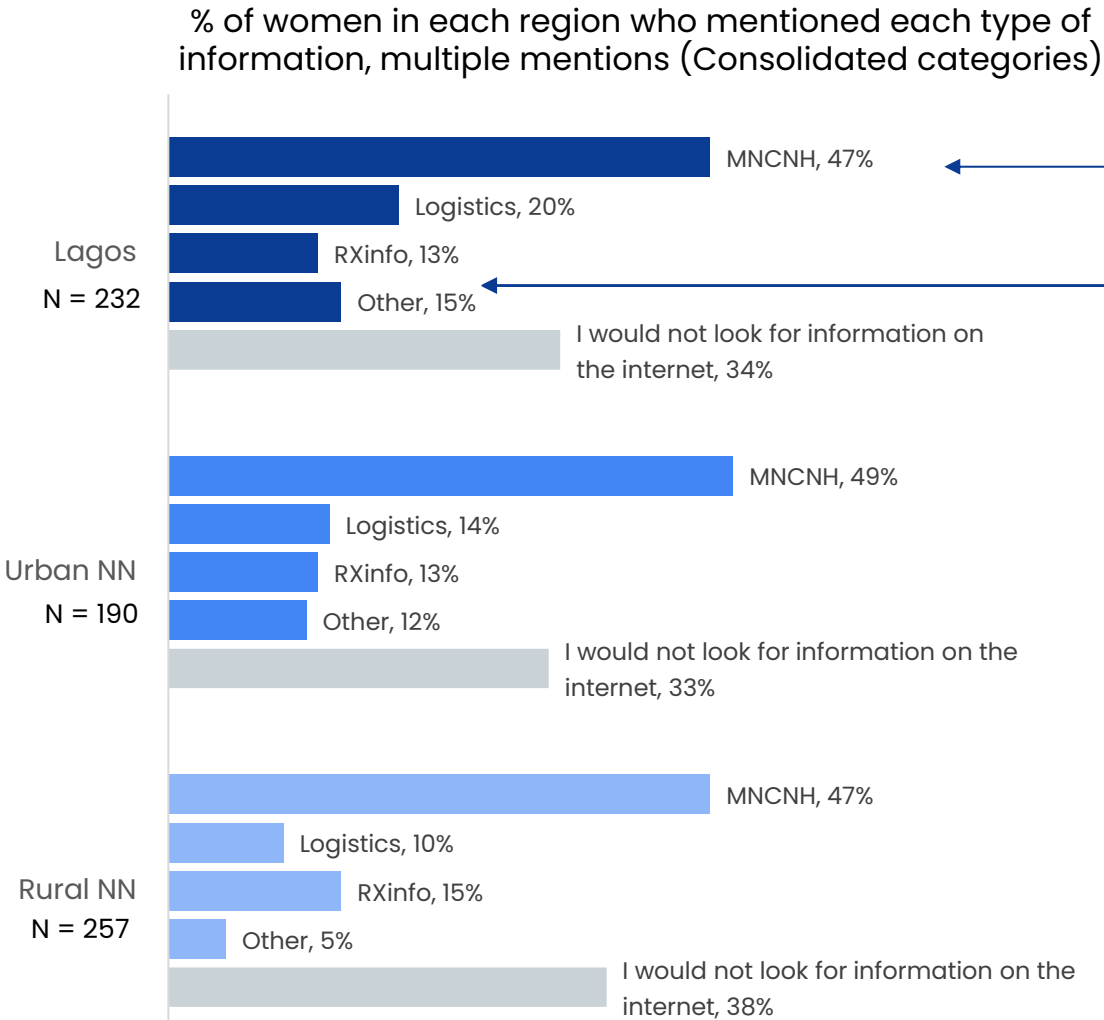
Note: This percentage is taken out of responses which were categorized. Some responses did not fall into a category, and some participants did not respond.

Context: Question asked as part of a skit about a woman who debated whether to look online for health information

- What kinds of health information would you be open to looking for on the internet? **Open-ended, asked to entire sample.**
- Note: Although to a lesser extent than in Kenya, women in Nigeria weren't as specific about what they looked for, therefore the number of women with categorized responses was significantly lower than the number of those who answered.

	Total sample	# of people who were asked	# of people who answered	# of people whose responses were categorized
Lagos	454	454	331	232
Urban NN	404	404	396	190
Rural NN	556	556	549	257

Quotes – Nigeria: If they were to look for health information online, what would they look for?



Note: This percentage is taken out of responses which were categorized. Some responses did not fall into a category, and some participants did not respond.



Concerning health I do check on the causes of ill-health, Cure and prevention of illness like malaria likewise the kind of food that will be beneficial to our health.

Lagos, indifferent



I browse about my health online, or probably If there is a drug that I bought and I want to find out more about the drugs and dosage, or to find out a prescribed drugs, or If I notice any form of ailment, I Google to find out about how we can manage the ailment so it won't escalate to what will cost us more money.

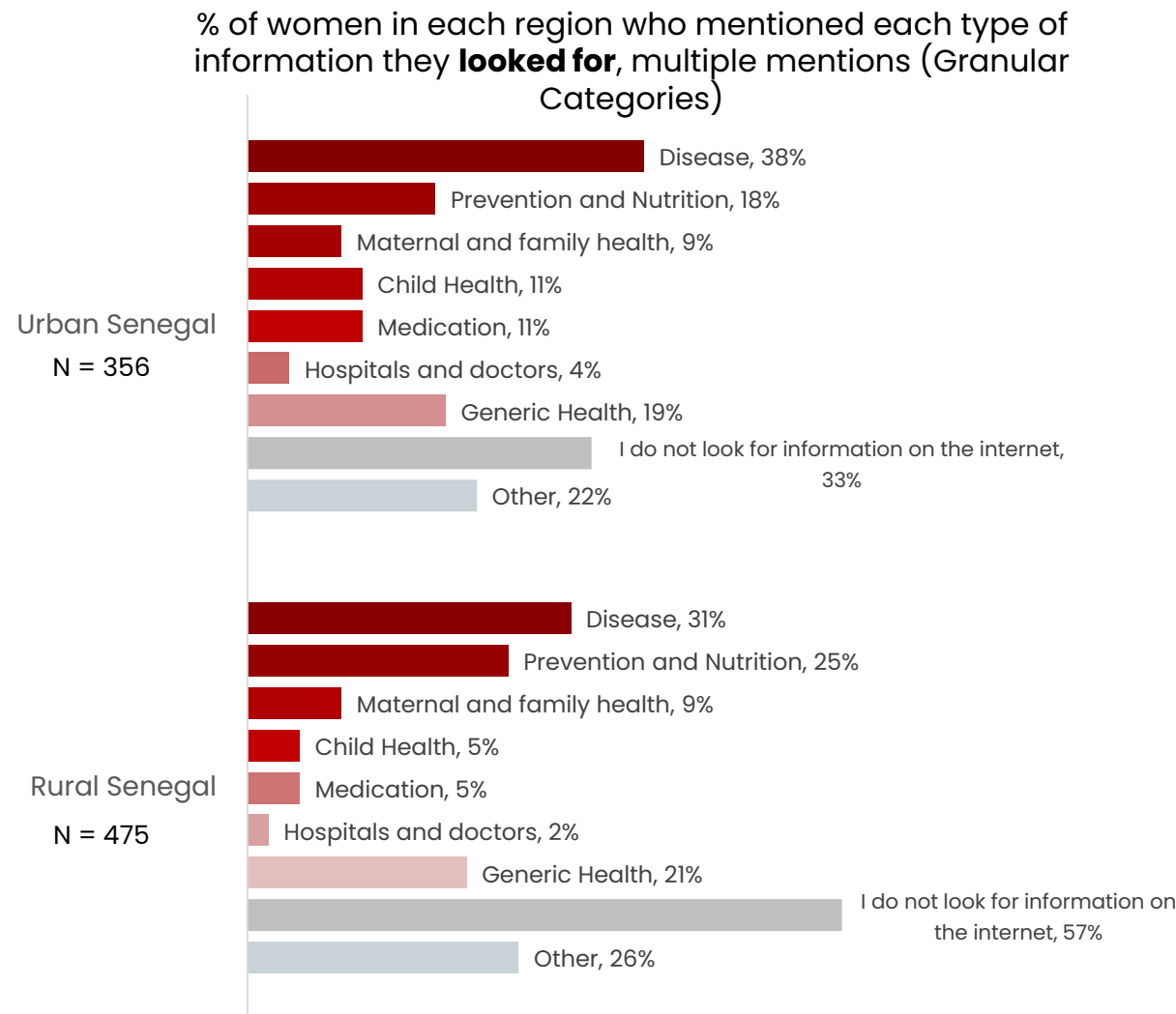
Lagos, enthusiastic



I receive health Information on Google and Chrome, to direct me on the right drugs to buy when I and my children are not feeling fine and I don't have enough money to go to the hospital, once I use them, we bounce back to health.

Lagos, enthusiastic

Insights – Senegal: What type of health information do you look for online?



Note: This percentage is taken out of responses which were categorized. Some responses did not fall into a category, and some participants did not respond.

33% of women in urban Senegal and 57% in rural Senegal have not looked for health information online.¹

The way women in Senegal spoke about what they looked for was a bit different than in Kenya and Nigeria. They were less descriptive and their responses were more difficult to code – this is why we have a category called “generic health” where they didn’t specify what type of health information they looked for.

Women in Senegal were much more like those in Nigeria, where they looked for information about an illness that they needed to diagnose and for treatment. However, in rural Senegal women were a bit more like Kenya where they were interested in understanding how to be healthy and prevent disease.

Categories

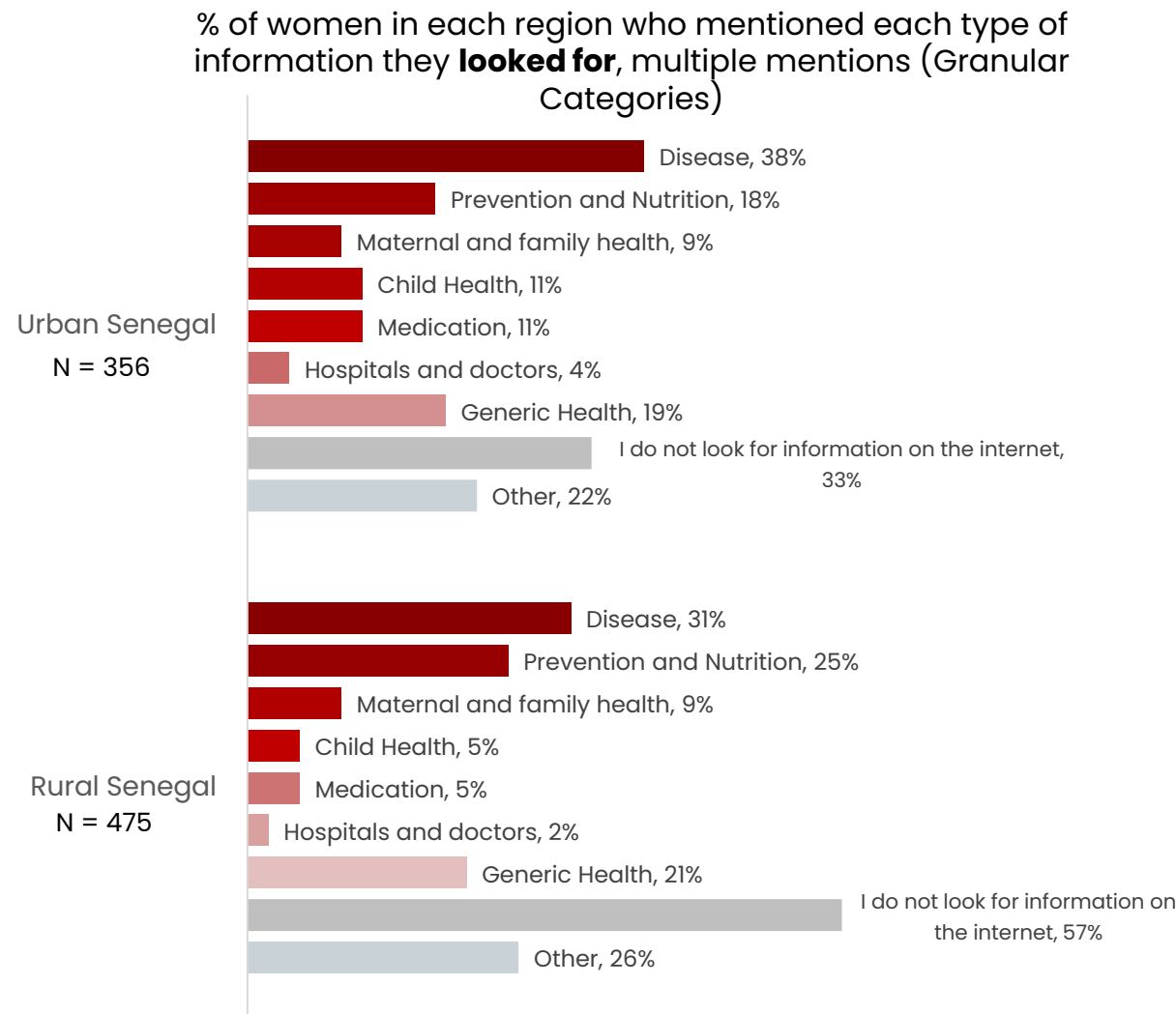
- Hospitals and Doctors:** Information about HCPs, e.g. location, which are available, or contact information.
- Medication:** Information about medication mostly about medication side effects or what it is for.
- Child Health:** Information related to children’s health including ailments, treatments or other information.
- Maternal and Family Health:** Information such as pre/postnatal health, women’s health, or family planning.
- Nutrition:** Information on food, nutrition, and healthy living.
- Disease:** Information about diseases, mostly their treatment or diagnosis.

Questions asked

- QC29 What kinds of health information would you be open to looking for on the internet?

¹Note that based on Quicksand’s early fieldwork in Senegal, we asked what health information women actually looked for rather than what they would look for, like we did in Kenya and Nigeria.

Sample Ns – Senegal: What type of health information do you look for online?



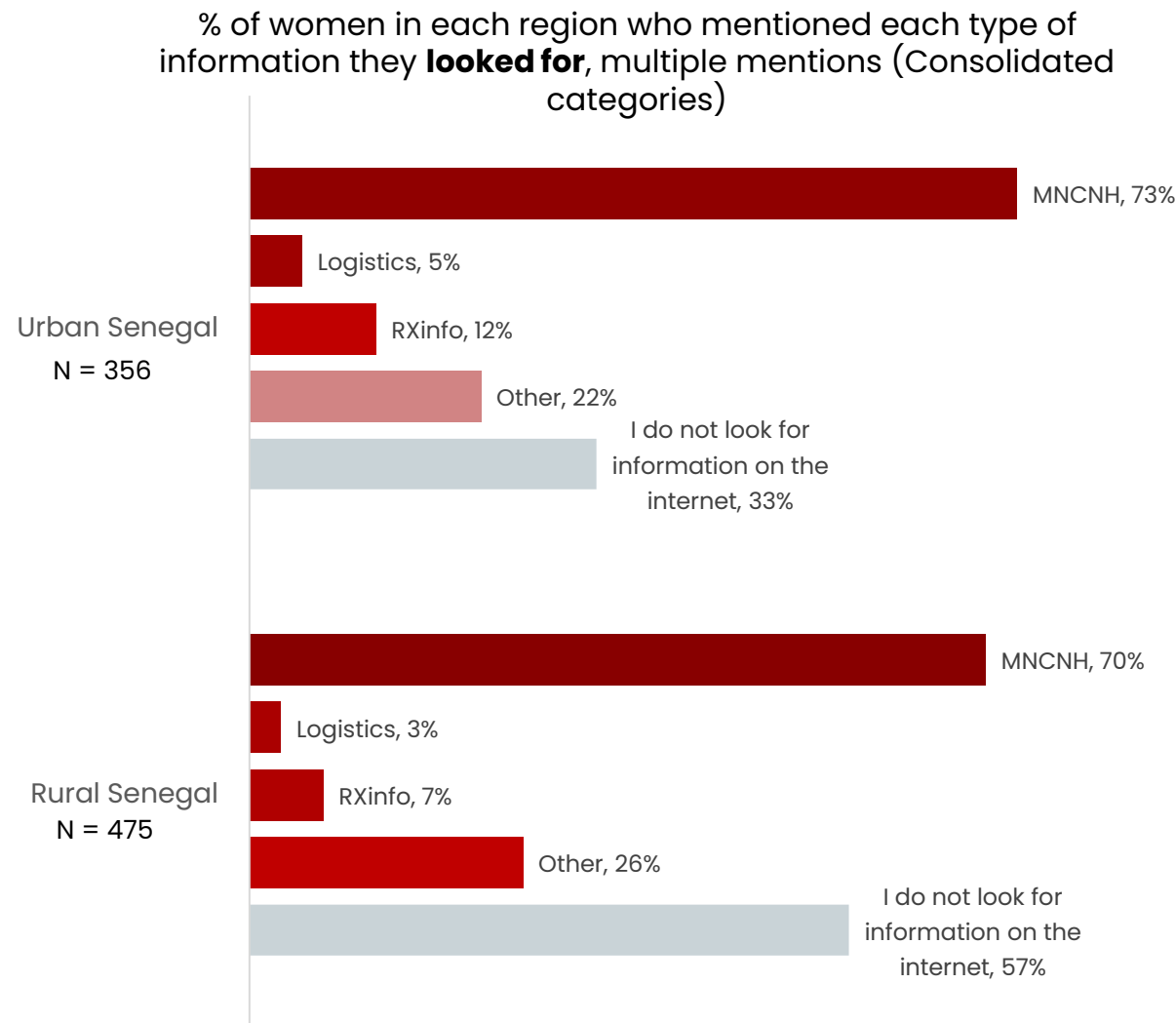
Note: This percentage is taken out of responses which were categorized. Some responses did not fall into a category, and some participants did not respond.

Context: Question asked as part of a skit about a woman who debated whether to look online for health information

- What kinds of health information have you looked for specifically on your phone? Tell me about different types of health information you've searched for.

	Total sample	# of people who were asked	# of responses given	# of categorized responses
Urban Senegal	582	582	365	356
Rural Senegal	783	783	491	475

Insights – Senegal: What type of health information do you look for online?

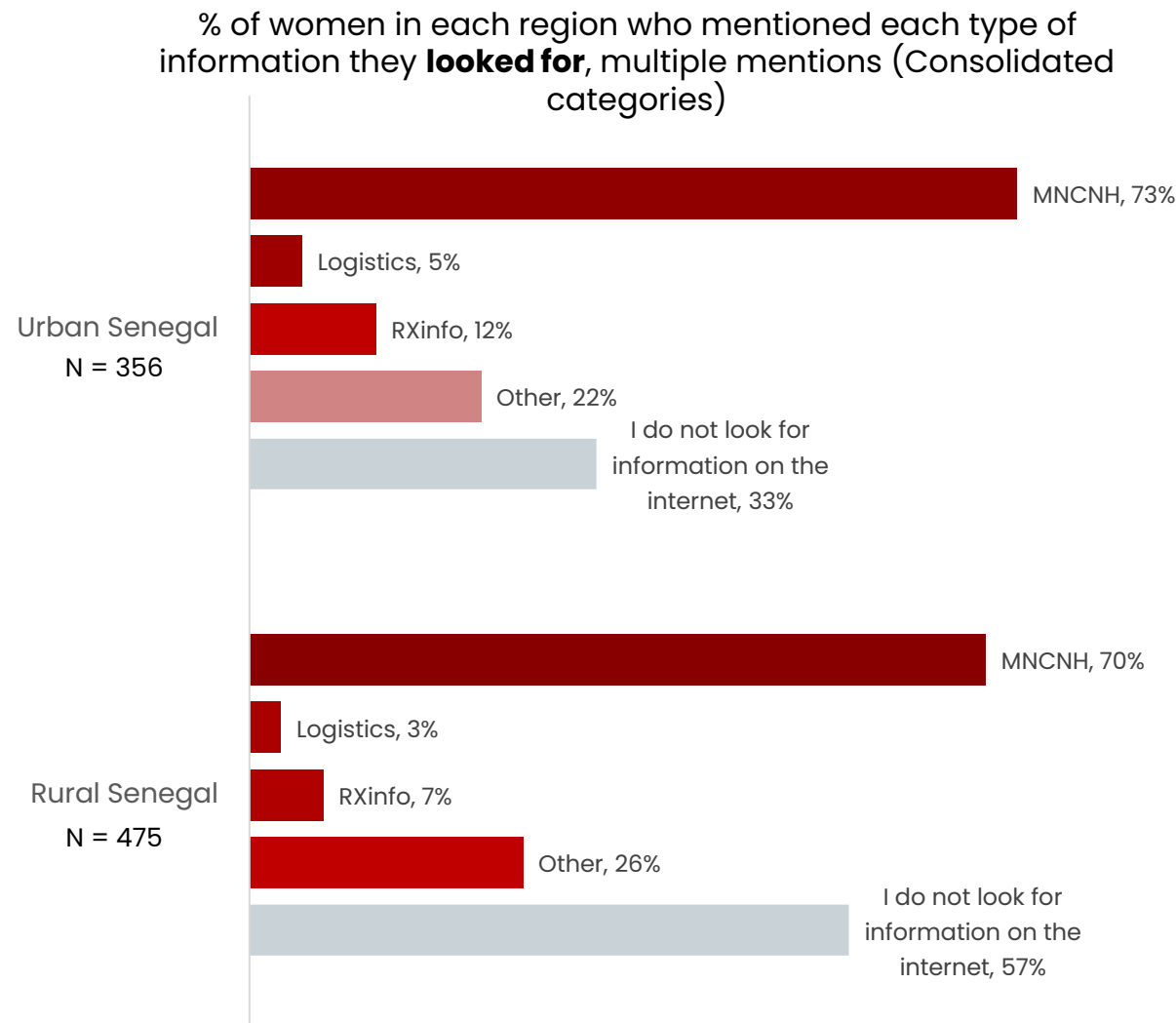


Note: This percentage is taken out of responses which were categorized. Some responses did not fall into a category, and some participants did not respond.

In Senegal, like Kenya, women in Senegal were primarily interested in health information for themselves and their families.

- Maternal, Newborn, Child Nutrition and Family Health:** Information related to maternal health, children's health, disease information, or nutrition.
- Logistics:** Information about HCPs, e.g. location, which are available, or contact information.
- RXinfo:** Information about medication mostly about medication side effects or what it is for.
- Other:** Generic or unspecified reference to health information seeking.

Sample Ns- Senegal: What type of health information do you look for online?



Note: This percentage is taken out of responses which were categorized. Some responses did not fall into a category, and some participants did not respond.

Context: Question asked as part of a skit about a woman who debated whether to look online for health information

- QC53 What kinds of health information have you looked for specifically on your phone? Tell me about different types of health information you've searched for. **Open-ended, asked to entire sample.**

	Total sample	# of people who were asked	# of people who answered	# of people whose responses were categorized
Urban Senegal	582	582	365	356
Rural Senegal	783	783	491	475

Category definitions for next question: Inductively derived reasons why women say they would like looking for health information online

Cheap

Finding health information online **saves women money**. Even if the healthcare is free, they need to pay money for travel to visit a health care provider.

Private

Finding health information is more **private**. Other people will not know what you are searching for or that you are searching at all.

Helpful (Senegal only)

A generically positive expression carrying little semantic content. For example, "It is useful" or "It's important."

Convenient

Women discussed how looking for health information online would be more convenient in that:

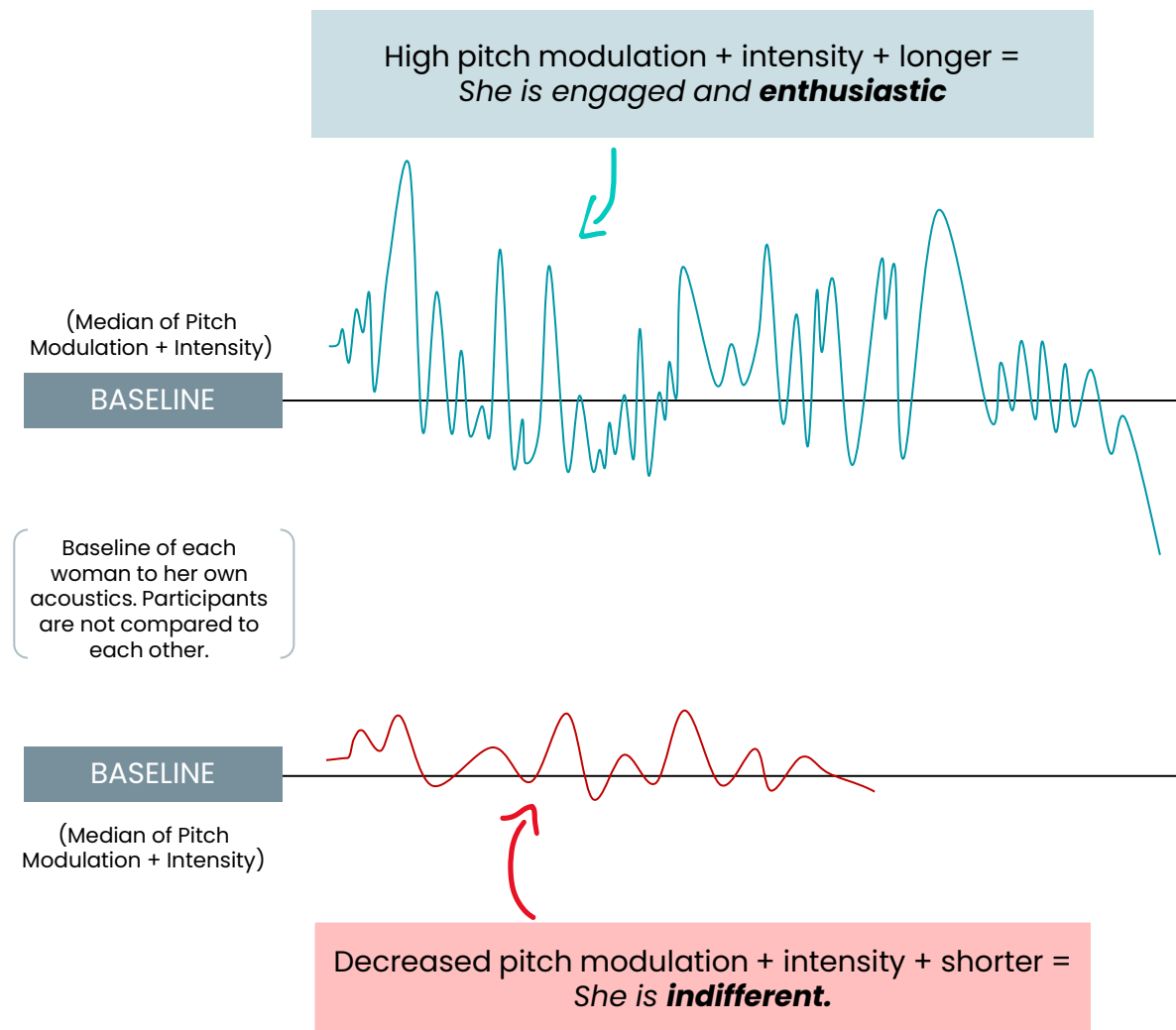
- It would **save time** of traveling and waiting to see the health care provider.
- Looking for health information online would require **less mental energy** because they would not have to work out how to leave their children or work and how to best travel.
- Lastly, being able to look for health information online would mean they could work this in **around their own schedule** rather than the times a health care provider is available.

Empowering

Women mention several reasons why they believe health information online is more empowering:

- Doctors online are sometimes perceived as being **as qualified as the health care provider a woman sees in person**.
- Women mention that **they can look in multiple places** to find information as well as comments from women like themselves.
- Last, because women can **look up information about their health online before seeing a health care provider**, they can be more prepared with questions.

Acoustic analysis for next question



These graphic representations are not from actual responses but are illustrative.

A brief explanation of acoustic analysis

To understand not just what a woman says but how she says it, we use acoustic analysis to extract key signals from their voices.

Each acoustic measure we use is a composite of speech signals based on the context in which responses are given. In the case of acoustic analysis in this deck, we use a composite measure of pitch modulation (how much a woman's voice goes up and down over her responses), intensity (how loud a woman speaks), and word count (how many words they say).

Each woman's acoustic measures are baselined against her own voice from other responses, not against other speakers. This personal baseline allows us to normalize for natural variations in speech, such as those influenced by different languages or dialects.

These measures are often associated with a greater degree of emotional intensity and engagement. Given that the context of this speech is positive, we therefore characterize these patterns as "enthusiasm".* When these characteristics are the opposite, we refer to this as "indifferent."

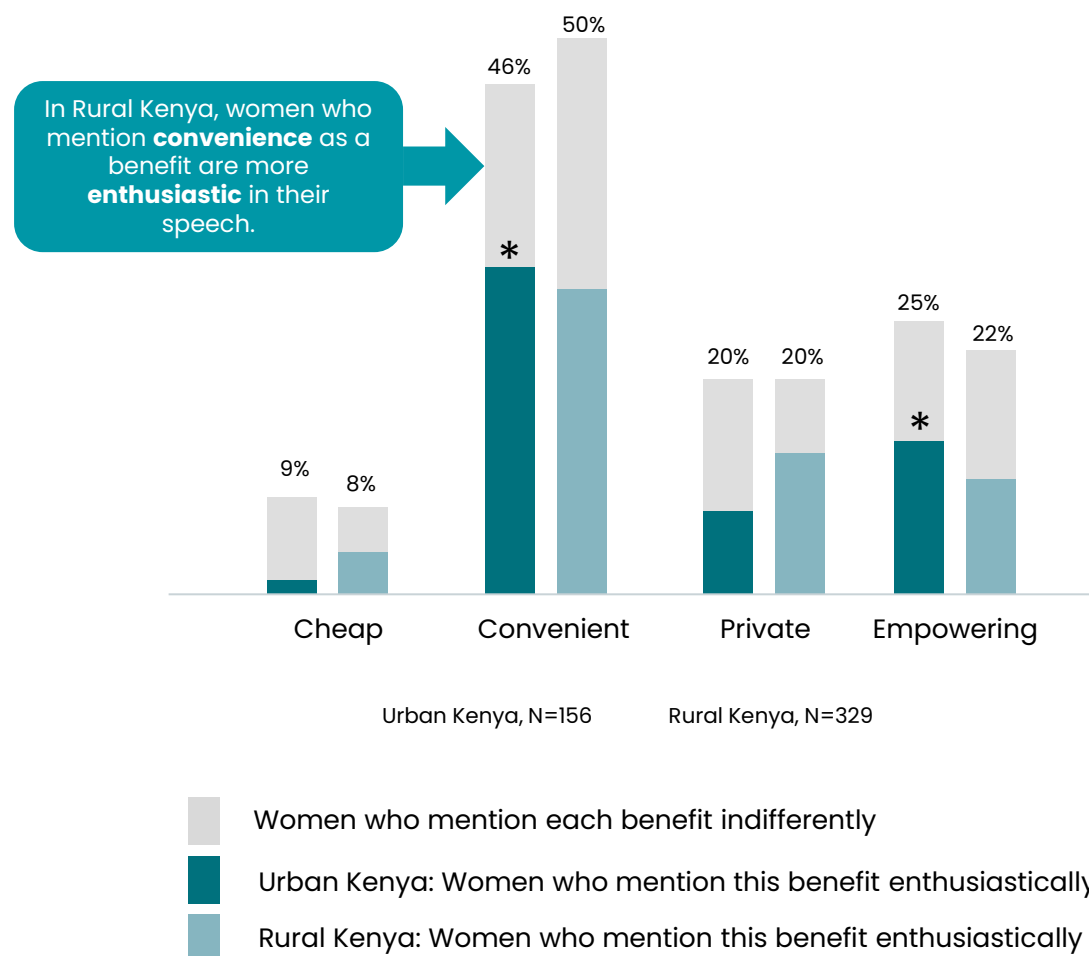
The charts to the left visualize this composite measure, which reflects the degree of "enthusiasm" in their speech, i.e. the degree of rise and fall in their pitch, the overall height compared to their baseline, and the length of time they speak for.

In the following slides, we describe this enthusiasm as also "at length and in detail."

*Freeman, V. (2019). Prosodic features of stances in conversation. *Laboratory Phonology*, 10(1).

Insights – Kenya: Women’s perceived benefits of health information online

% of women in each region who mention each type of benefit with share that spoke enthusiastically, multiple mentions



* The degree of the enthusiasm for Convenience and Reliable are both significantly stronger than Cheap, but not private.

Women in Kenya are very enthusiastic about the convenience that getting health information online would give them.

The chart on the left shows that, of the women who mention a benefit of getting health information online, about half mention convenience, much more than privacy and empowerment.

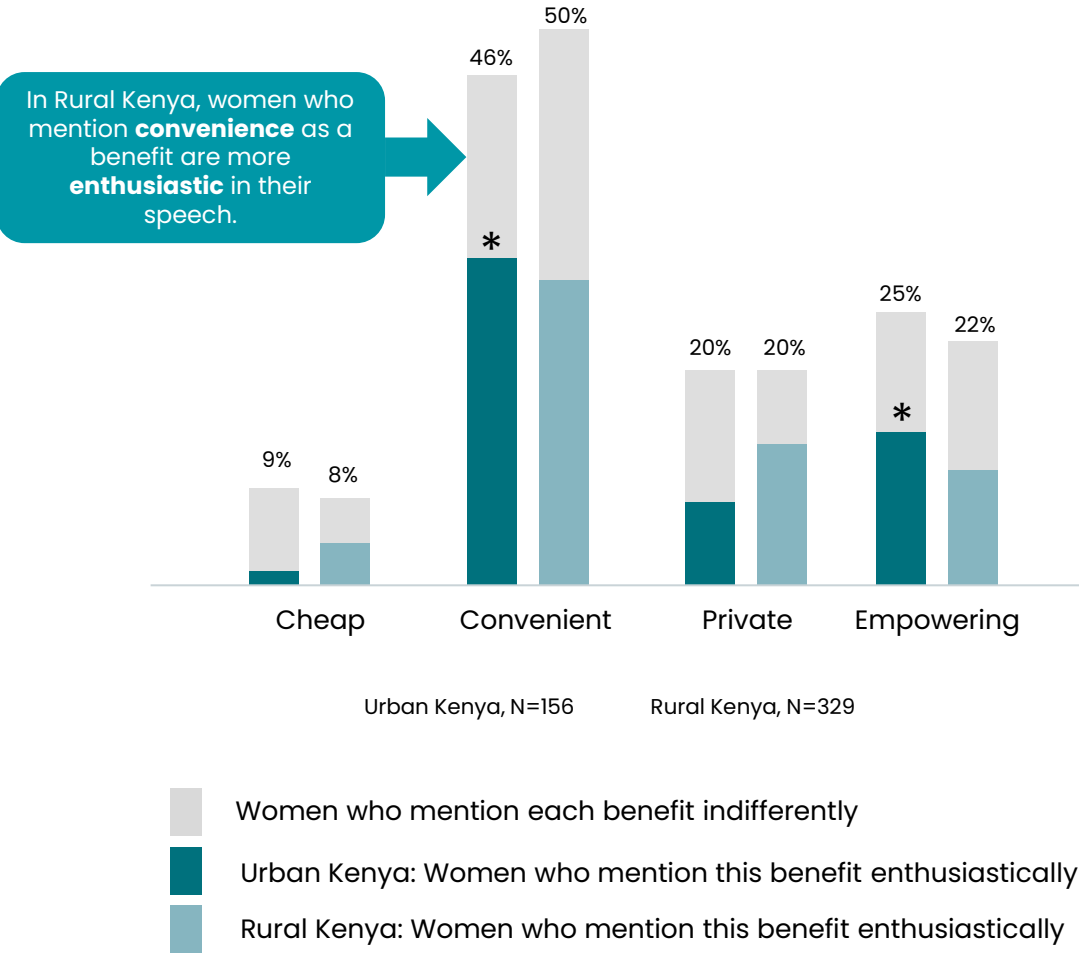
Moreover, convenience was talked about with enthusiasm, at length and in detail. For women in urban Kenya, the *strength* of enthusiasm for convenience and empowerment is statistically significantly stronger than enthusiasm for low cost.

Why is convenience felt so strongly to be a benefit in Kenya? Remember that on slides 4 and 6, women in Kenya were looking mainly for health information online – very different from women in Nigeria who were more interested in diagnosing a condition or finding out what medicine to take.

Women in Kenya wanted to get information about nutrition, lifestyle, and to understand details about different diseases. For this type of activity, it is unlikely they would want to visit a health practitioner each time. Therefore, it makes sense that they would put such stock in convenience.

Sample Ns – Kenya: Women’s perceived benefits of health information online

% of women in each region who mention each type of benefit with share that spoke enthusiastically, multiple mentions



* The degree of the enthusiasm for Convenience and Reliable are both significantly stronger than Cheap, but not private.

Question asked

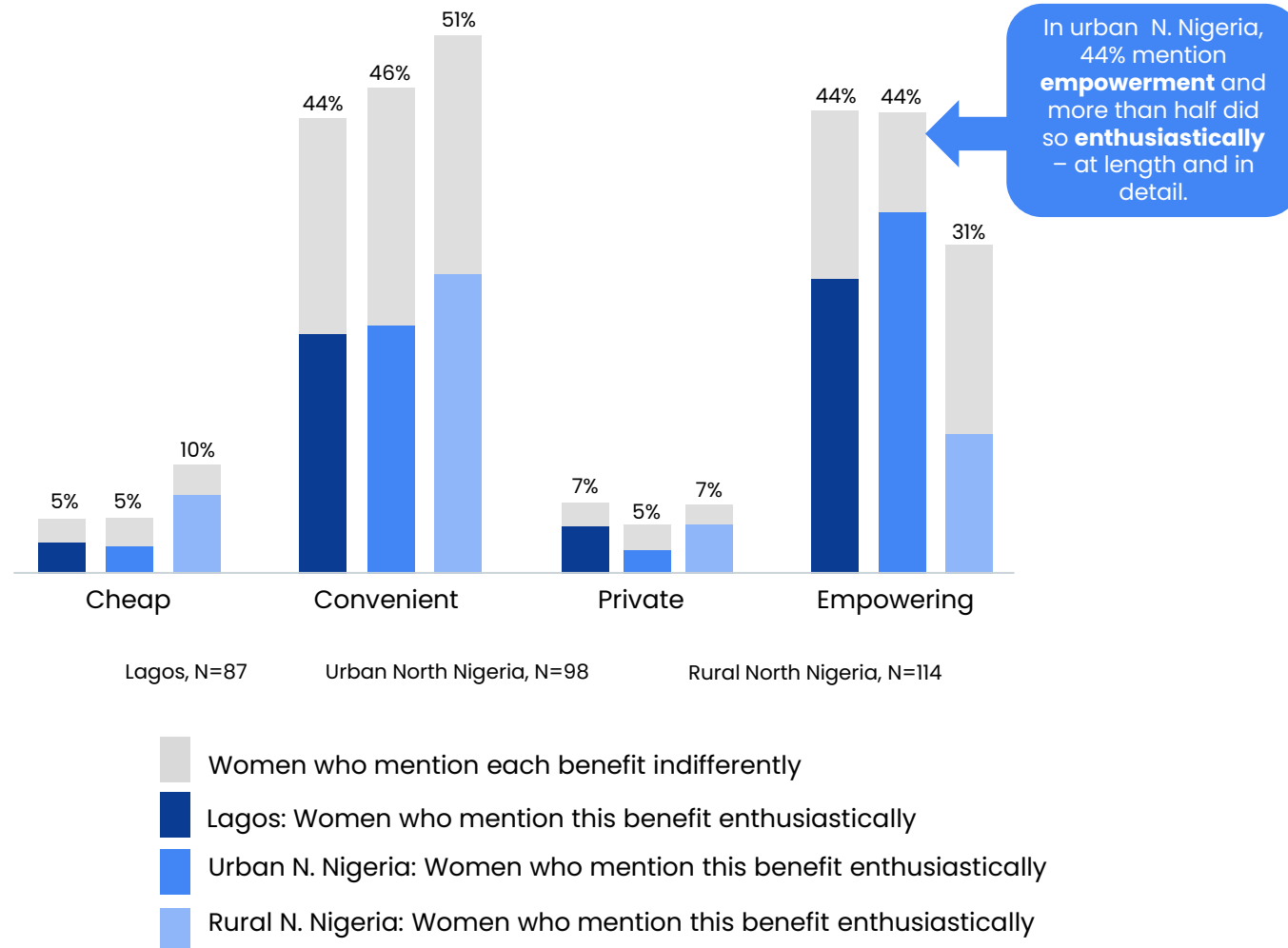
- QB37: Why do you think it might be important to look up information on the phone instead of asking someone else like a doctor or someone you know? Open-ended, asked to everyone.
- QC27: Tell me why you trust the sources of information you just told me about? (Preceded by, QC26: In your life, where do you find information about your health or your family’s health?)

	Total sample	# of people who were asked	# of people who answered	# of people whose responses were categorized
Urban Kenya	405	405	331	156
Rural Kenya	859	859	665	329

- If a response was not categorizable in QB37, then the response to QC27 was probed. If neither response could be classed, it was considered uncategorized.
- Responses which only deny the premise that looking up info online is beneficial, such as "It's better to go to the doctor instead of searching from the phone." are not considered "categorized" in the table above (Urban Kenya: 59; Rural Kenya: 117).

Insights – Nigeria: Women’s perceived benefits of health information online

% of women in each region who mention each type of benefit with share that spoke enthusiastically, multiple mentions



Women in Nigeria are very different in thinking that finding health information online would be not just convenient but also empowering. Nearly none mentions cheap or private.

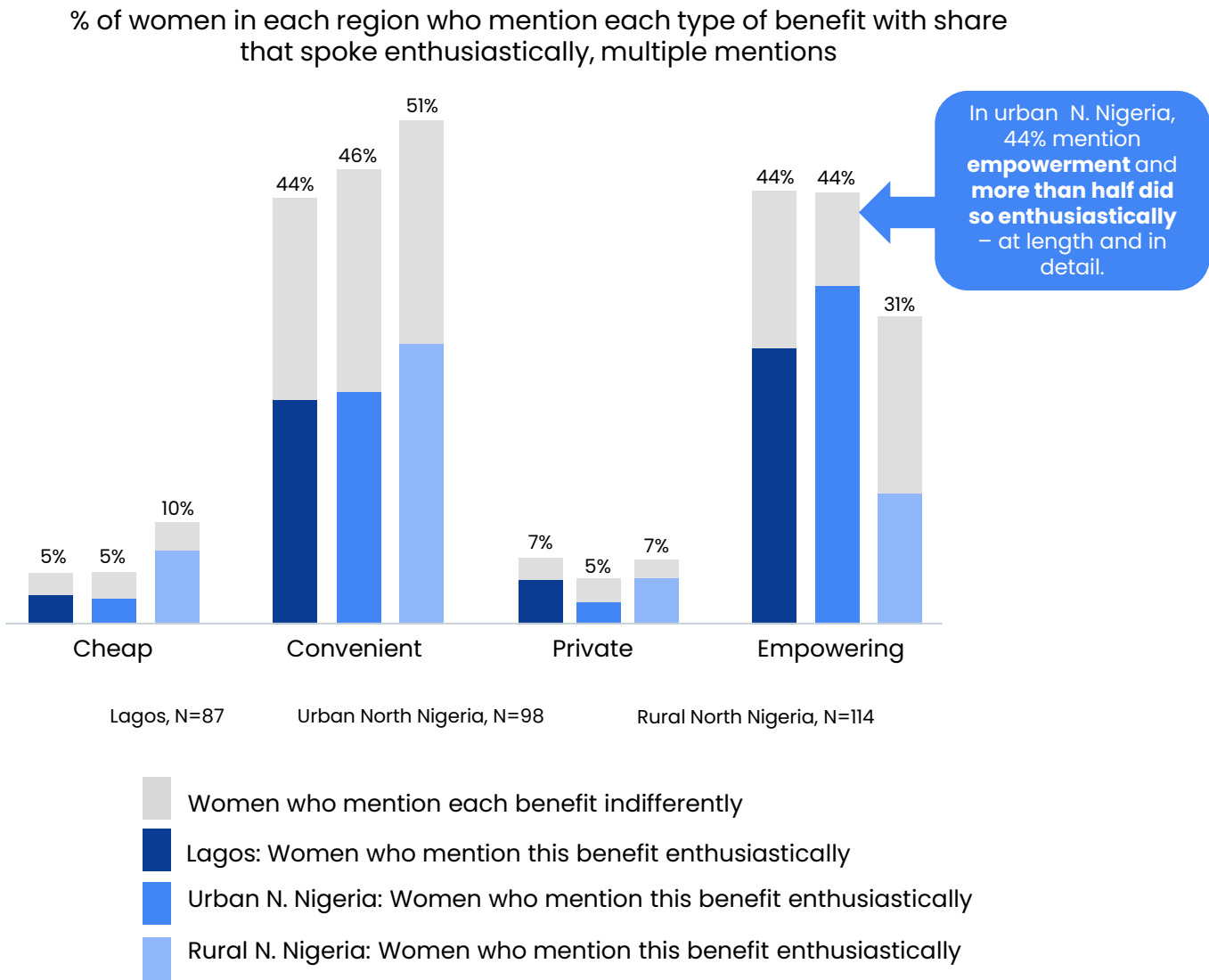
Women in Nigeria focused on being able to fit finding health information online within their schedules most often – a characteristic that is both empowering and convenient. Roughly half of these women spoke at length and in detail. It is this characteristic that the most women in rural Northern Nigeria mentioned and that many spoke enthusiastically – at length and in detail.

Women in Lagos and Northern Nigeria mentioned empowerment as much as convenience. Moreover, more of those that mentioned topics associated with empowerment spoke enthusiastically – at length and in detail.

This means that women in Lagos and urban Northern Nigeria very much have the perception that they can rely on health information found online. As slide 6 says, women in Nigeria spoke about finding information about **diagnosing symptoms and getting recommendations for medication**.

What many women are saying in their responses here is that they **trust information they see online even more than going to see health care providers**. They talk about being able to see the followers of a doctor online, and that they can cross-check the information in several different place online rather than just relying on one health practitioner.

Sample Ns – Nigeria: Women’s perceived benefits of health information online



Question asked

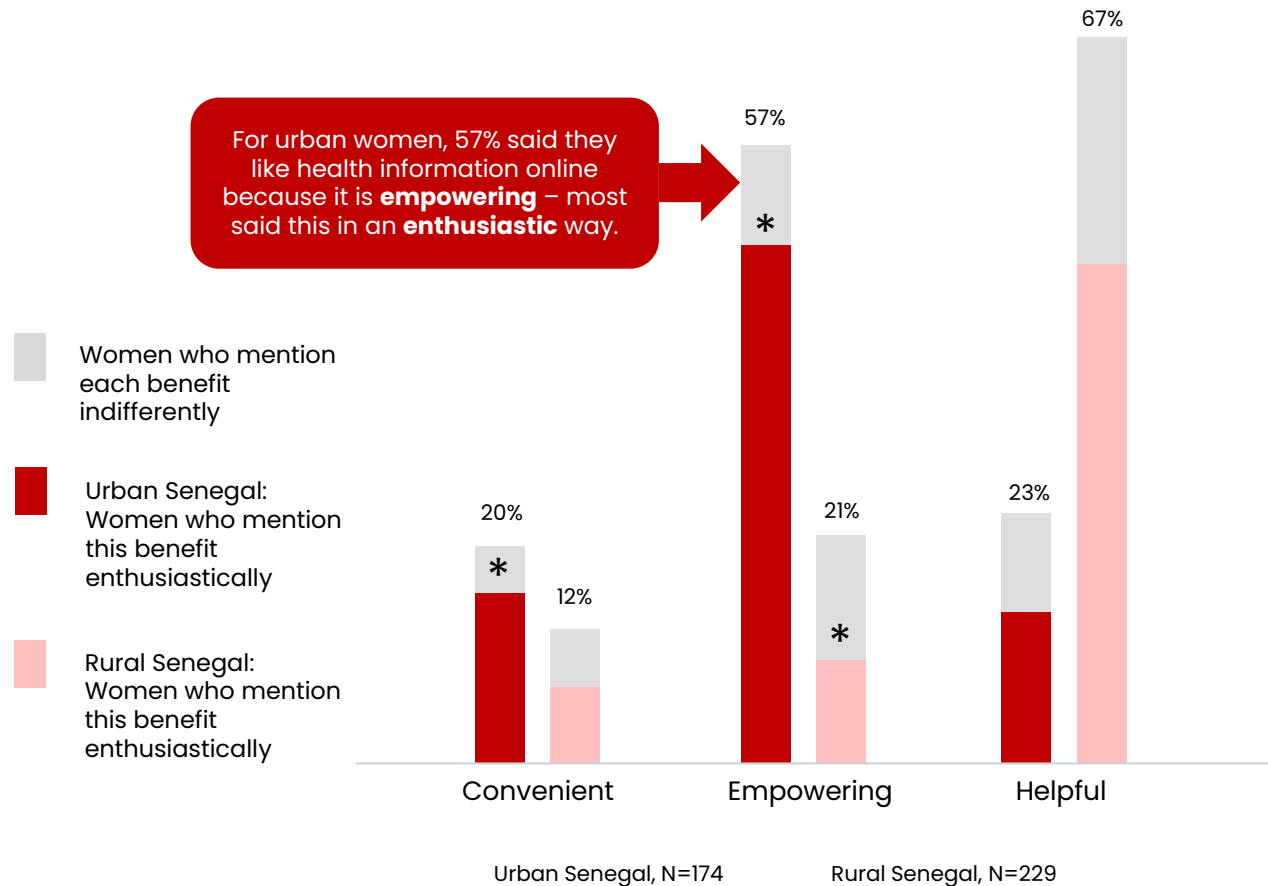
- QB36: Why do you think it might be important to look up information on the phone instead of asking someone else like a doctor or someone you know? Open-ended, asked to everyone.
- QC27: Tell me why you trust the sources of information you just told me about? (Preceded by, QC26: In your life, where do you find information about your health or your family’s health?)

	Total sample	# of people who were asked	# of people who answered	# of people whose responses were categorized
Lagos	454	454	182	87
Urban NN	404	404	160	98
Rural NN	556	556	175	114

- If a response was not categorizable in QB37, then the response to QC27 was probed. If neither response could be classed, it was considered uncategorized.
- Responses which only deny the premise that looking up info online is beneficial, such as "It's better to go to the doctor instead of searching from the phone." are not considered "categorized" in the table above (Urban Lagos: 42; Urban NN: 20; Rural NN: 26).

Insights – Senegal: Women’s perceived benefits of health information online

% of women in each region who mention each type of benefit with share that spoke enthusiastically, multiple mentions



* In Urban Senegal, the strength of enthusiasm for Reliable and Convenience are both significantly higher than Generic.

* In Rural Senegal, the strength of enthusiasm for Reliable is significantly stronger than Generic, but not Convenient.

For women in Senegal, the benefit women spoke of most was empowerment, and they spoke about this benefit in a statistically significant enthusiastic way.

This is very different from Kenyan women, who spoke enthusiastically about convenience, as well as from Nigerian women who spoke about convenience and empowerment but without much enthusiasm.

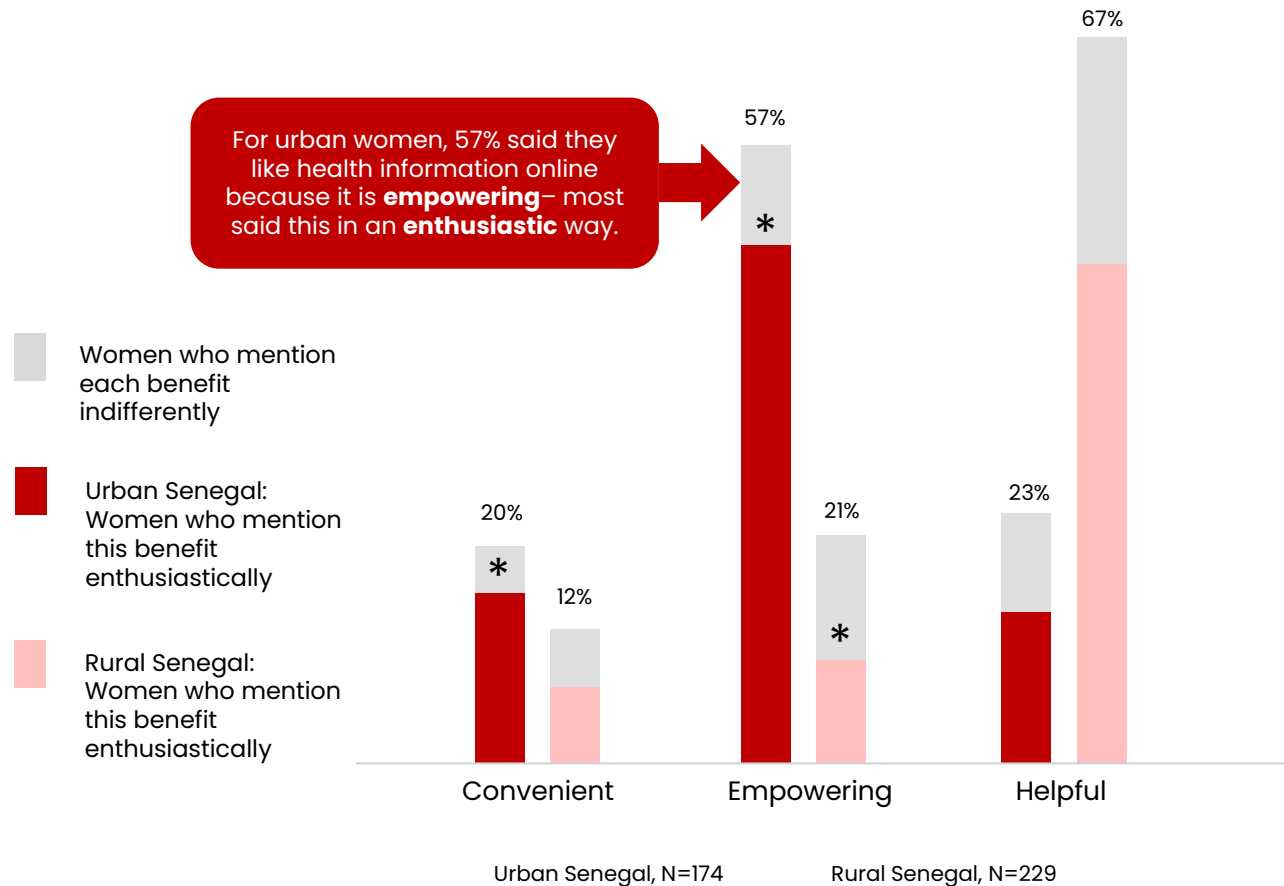
Unlike in Kenya and Nigeria, cost and privacy do not consistently surface as reasons women in Senegal like getting health information from their phones.

Question asked

- What do you think are the benefits of getting health information on your phone? Are there any concerns or risks?

Sample Ns – Senegal: Women’s perceived benefits of health information online

% of women in each region who mention each type of benefit with share that spoke enthusiastically, multiple mentions



* In Urban Senegal, the strength of enthusiasm for Reliable and Convenience are both significantly higher than Generic.
* In Rural Senegal, the strength of enthusiasm for Reliable is significantly stronger than Generic, but not Convenient.

Question asked

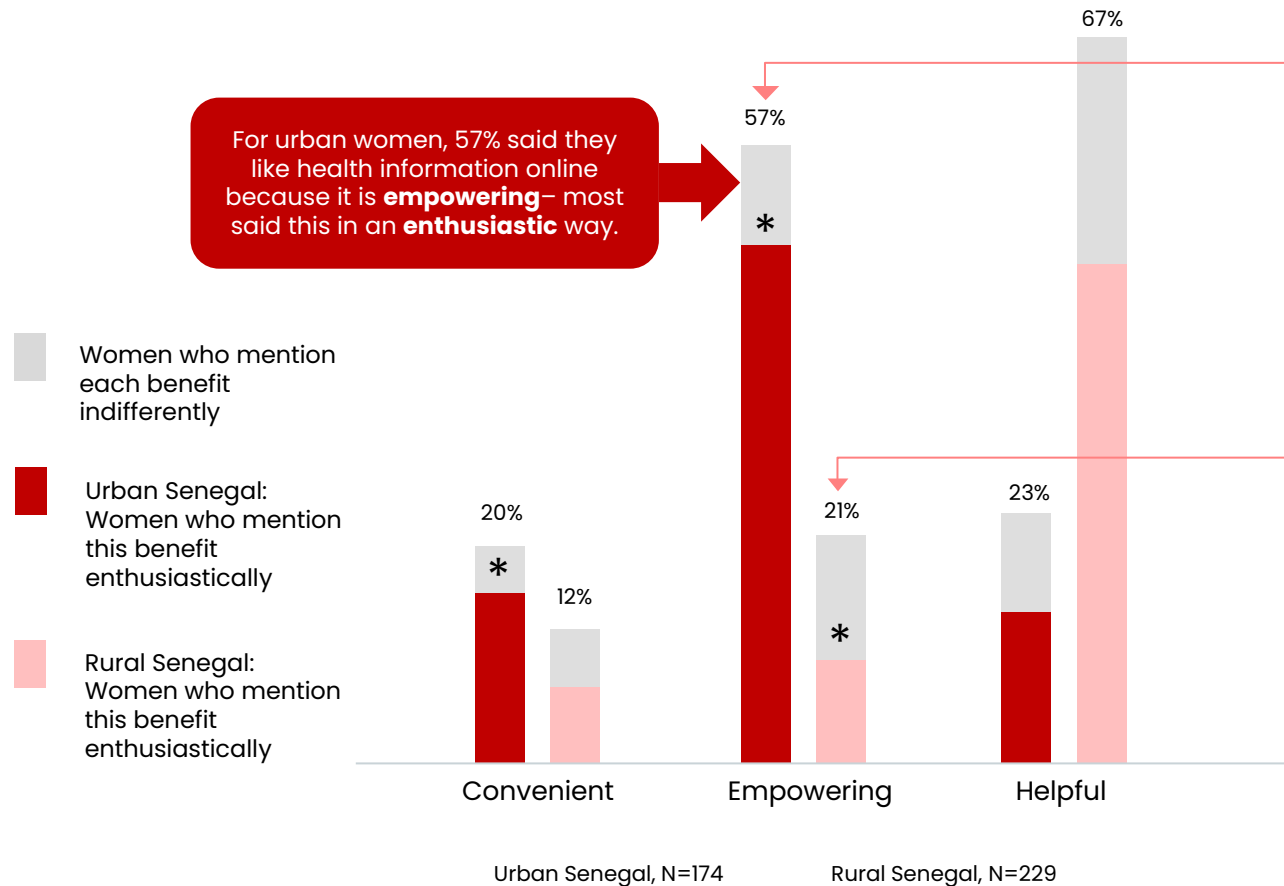
- QC54 – Would you prefer to look for health information on your phone first or go directly to a health center when you have a health concern? Why?
- QC55 What do you think are the benefits of getting health information on your phone? Are there any concerns or risks? Open-ended, asked to full sample

	Total sample	# of people who were asked	# of people who answered	# of people whose responses were categorized
Urban Senegal	582	582	393	174
Rural Senegal	783	783	533	229

- Responses which only deny the premise that looking up info online is beneficial, such as "It's better to go to the doctor instead of searching from the phone." are not considered "categorized" in the table above (Urban Senegal: 176; Rural Senegal: 226).

Quote and Audios – Senegal: Women’s perceived benefits of health information online

% of women in each region who mention each type of benefit with share that spoke enthusiastically, multiple mentions



Checking your health status on your phone is very important because it allows you to discover yourself as a woman. As a woman, the questions we ask on the internet allow us to get to know ourselves better and to understand the health challenges we go through. Truly, being able to learn about our health through our phones is very important.

Urban Senegal, enthusiastic, Wolof



Yes, it’s useful; it allows me to look up health information and see where I stand.

Rural Senegal, indifferent, Wolof

* In Urban Senegal, the strength of enthusiasm for Reliable and Convenience are both significantly higher than Generic.
* In Rural Senegal, the strength of enthusiasm for Reliable is significantly stronger than Generic, but not Convenient.