



Exploring the consumer perspective on antimicrobial resistance

June 2015

Contents

1. **Background** – objectives and project plan
2. **Qualitative research methodology** – a summary
3. **Findings**
 - People's relationship with antibiotics
 - Current knowledge and understanding of AMR and resistance
 - Reactions to different 'ways in' of talking about resistance
 - Current language and how it is understood
4. **Summary of key insights**
5. **The doctor interviews** – summary findings
6. **A few thoughts on implications**

Background

Good Business has conducted some [in depth qualitative research](#) into people's relationship with antibiotics.

The aim was to get a deep understanding of [how people think and feel about antibiotics](#), their [current understanding of the resistance issue](#) and [the language they use](#) around this area – how they talk about it and what words they use.

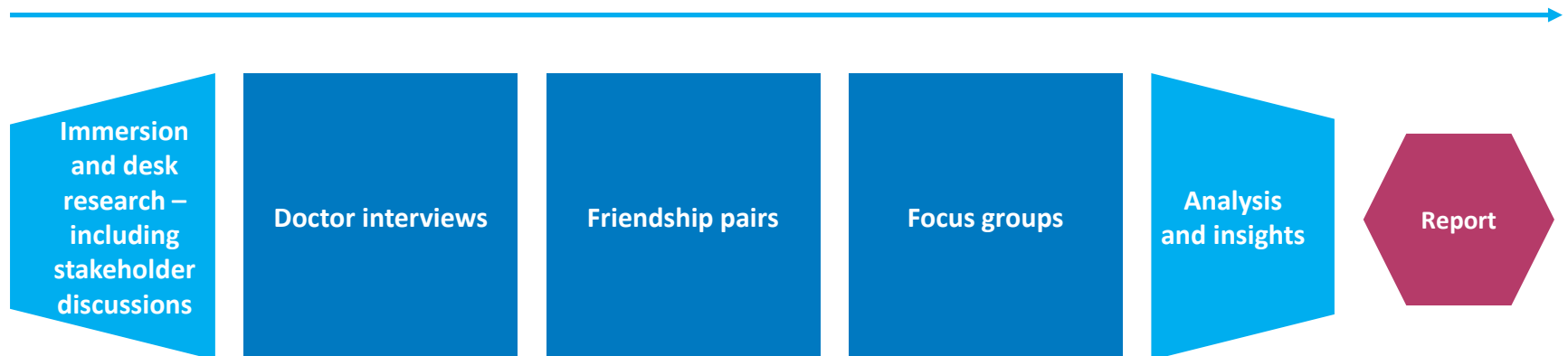


This will become [the foundation for future engagement efforts](#), ensuring that they are built from a genuine understanding of where consumers currently are on this issue and how it plays out in their lives

Objectives and process overview

What is the nature of people's relationship with antibiotics and what is the best language to use to talk to them about antibiotic resistance?

- Explore existing knowledge, attitudes and perceptions around antibiotics and their use
- Explore differences by demographic and attitudinal factors
- Identify the language people use to talk about this, and their understanding of the words that others use
- Uncover potential 'routes in' to talk to people about antibiotics and resistance, that will strike a chord with them



Our core qualitative methodologies are friendship pair depth interviews and focus groups



PAIRS: two hours talking to two friends – the secure dynamic helps them open up and be honest



GROUPS: further exploration of key areas and interesting angles, using group dynamic to open up discussions

Pair	London region	
	Life stage	Education
1	Pre-parent	No education past 16 years old
2	First time parent	University educated
3	40-60 year olds	University / further education
4	Aged 70+	Education up to 18 years old
Pair	Manchester region	
	Life stage	Education
5	Pre-parent	University / further education
6	First time parent	Education up to 18 years old
7	40-60 year olds	No education past 16 years old
8	Aged 70+	University educated

Group	London region (split urban and suburban)		
	Age	Education / Social grade	Relationship with antibiotics
1	18-25	At university	Mix
2	18-25	At university	Mix
3	18-25	Not university educated	Mix
4	25-39	AB	Mix
5	40-60	C2DE	Mix
6	25-50	Mix	Strongly agree: <i>When I'm ill I like to take antibiotics</i>
Group	Birmingham / Scotland (urban)		
	Age	Education / Social grade	Relationship with antibiotics
7	18-25	Not university educated	Mix
8	40-60	C2DE	Mix
9	25-39	AB	Mix
10	25-50	Mix	Strongly agree: <i>When I'm ill I like to take antibiotics</i>

Findings

1. **People's relationship with antibiotics**
2. Current knowledge and understanding of AMR and resistance
3. Reactions to different 'ways in' of talking about resistance
4. Current language and how it is understood

NOTE: All verbatims in **dark blue** are from the focus groups, those in **light blue** are from the friendship pairs

Most people think they know when they need antibiotics – they don't need the doctor to tell them

It tends to be something they have thought about before they get to the doctor's surgery – and it shapes their expectations for the appointment

Key factors that drive belief in self diagnosis

"I know my body"

If I felt really bad [and the doctor didn't give them to me] I'd ask to see another doctor. You know your own body.

M, 25-39, AB, London

"I know what's worked before"

If I'd had it already and they'd treated me with antibiotics then I'd want them.

M/F, 18-25, at university, London

I always know. You just know in yourself.

F, 25-39, AB, Birmingham

The deciding factor is nearly always how ill they feel – it's about severity rather than type of illness

Nearly everyone thinks you need antibiotics when you're 'really ill' – even the few that get the distinction between viral and bacterial talk about *how you feel* not *what you've got*

What makes you think you need antibiotics?

You feel really terrible – unable to function

'Regular' (OTC) medicine isn't having an impact

It's lasting a long time

Not able to fight it myself

It depends on the intensity of the symptoms. If you can't move, it's an NHS issue.

M/F, 18-25, at university, London

If it hinders day-to-day stuff. If you can get on with it then it's nothing major, if it's more you might need antibiotics.

M/F, 18-25, at university, London

I just know when I have been suffering for two or three weeks that I need more than Lemsip. They're stronger than anything else, it has to be antibiotics at this point.

F, 40-60, no education past 16 years old, Manchester

You don't feel like it's going to get better whatever you take. It's all of it together – temperature, lethargic, you can't cope with it. It's a stronger pain. It takes it out of you.

F, 40-60, C2DE, London

And this means there is a strong sense of ‘validation’ connected to antibiotics – getting them is ‘proof’ you’re ill

If you get antibiotics it means you’ve got a ‘real illness’ and it’s treatable, if you don’t you’re not ‘properly ill’, you don’t get medicine for anything else and it ‘doesn’t count’

How do you feel when you get antibiotics?

Sense of validation
– really is
something wrong
with you

The trip to the
doctors was ‘worth
it’

Means you’ll get
better, something
you can do about it

For some
(particularly older)
it’s not anything
worse

I feel like I haven’t wasted the doctor’s
time or my own.

M/F, 18-25, not university educated, Birmingham

It’s like a magic pill. If I
take these I’ll be sorted.

M/F, 18-25, not university
educated, Birmingham

I’m reassured
it’s nothing
more serious, it
just needs
antibiotics.

M, 73, education up
to 18, London

You get more sympathy once
you’ve got antibiotics.

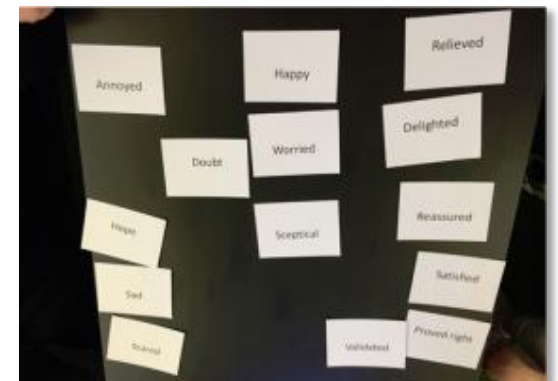
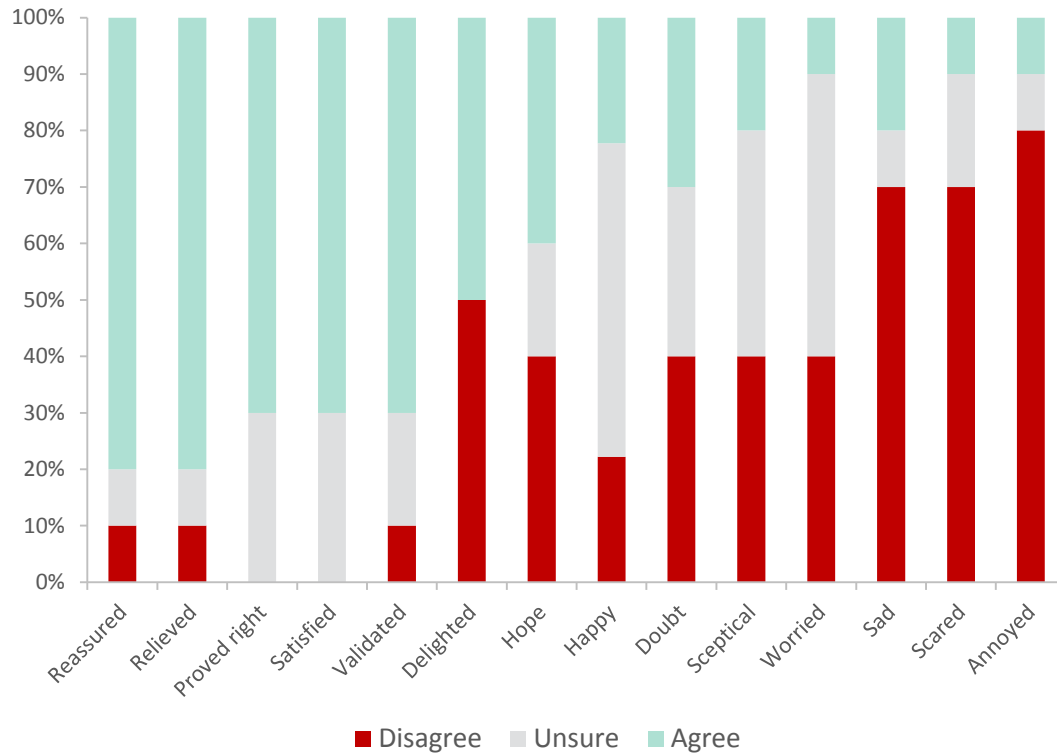
M/F, 25-50, Mixed, Birmingham

You know in a couple of days you’ll be better.
Plus it confirms I am ill, my girlfriend will
believe me.

M, 25-39, AB, London

We see this reflected in the emotions people associate with getting antibiotics

We used a mapping exercise to get people to identify emotions they do and don't feel when they get antibiotics



And many have plans in place for the doctor's surgery, to make sure they get them

Primary antibiotic-getting 'tactics'

Look up symptoms beforehand so they know what to say

Dial everything up a few degrees

Be a pain and refuse to move

It's how well you play it. If you say, I'm going to die, they'll give you something. A couple of headaches, they won't.

M/F, 18-25, at university, London

I just said I hear what you're saying but I don't agree. I could see him getting red, thinking I've got to get rid of this woman. He gave me a lecture about giving out too many. I thought I don't care what you're saying, I feel really, really rough. I lied to him and said I'd had symptoms for 5-6 days and I hadn't. I said I'm here for a prescription, I'm not moving. I was there about 10 minutes.

M/F, 25-50, Mixed, London

If you've looked it up online beforehand and know you should be prescribed something it helps. You go in with a goal and say you need them.

M/F, 18-25, at university, London

But that's not to say everyone is 'happy' to get them – it's more complicated than that, and it varies

Necessary evil

Relationship with 'putting things into my body'

Perfect solution

All about 'natural'

Think your body might 'get used to them'

Want anything to give you a 'fix'

Hate taking any kind of pill

Think you need to build up your immune system

Can't accept the idea of being ill

I don't like to take them. I don't get ill, sometimes colds, but I just rest up with chamomile. Antibiotics should be a last resort. If possible, natural remedies are always better.

F, 33, pre-family, university, Polish

It's your tolerance level. Your body adapts to it.

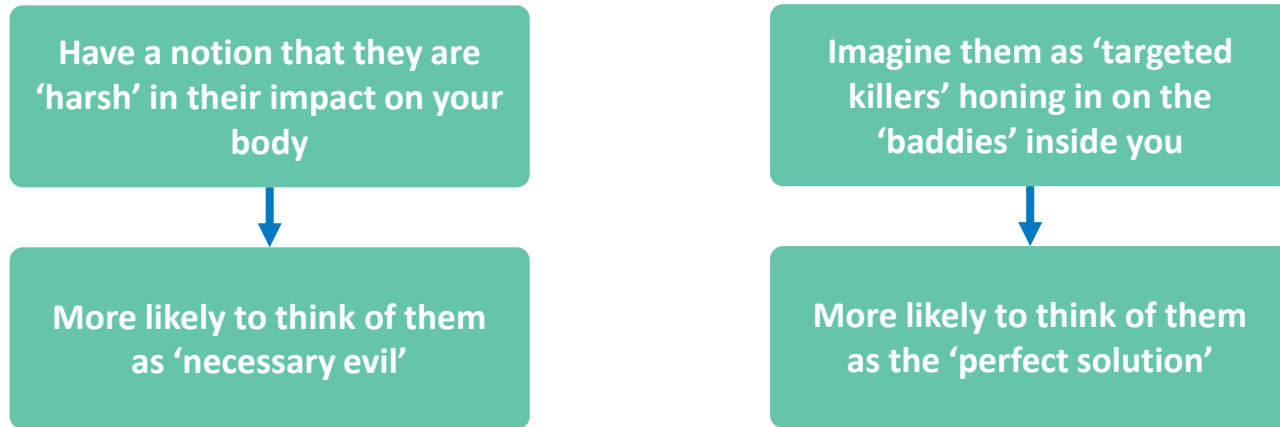
M, 25-39, AB, London

I had a persistent cough but it was a virus so they said no. You feel desperate. You leave thinking no, I want to get better!

F, 40-60, C2DE, London

Where people sit on this spectrum is often linked – though vaguely – to how people think antibiotics work

No one has a clear understanding of how antibiotics work in the body, and most haven't thought much about it, but the associations they have are part of the overall mix that shapes their attitudes



It's like going through chemo. It kills the bacteria but all the good things too. It makes me think I have to eat extra healthy. I'm aware it is damaging to my system so I must replenish the good bacteria and vitamins.

F, 33, pre-family, university, Polish

They kill off what's not supposed to be there, don't know how but it's amazing.

F, 40-60, C2DE, London

And this all goes into the mix when it comes to how people take antibiotics

Many of those who have some reluctance around taking antibiotics will purposefully avoid taking the whole course – while for others it's more about the inconvenience

Motivation for not finishing course

Minimise the impact on my body

Took one and it gave me a boost for my body to heal naturally. I threw the rest away.

M/F, 18-25, not at university, London

Interferes with other things in my life

If it's on the weekend and you want to go out drinking, you skip the pill. It's a bit of a dilemma.

M/F, 18-25, not at university, London

Findings

1. People's relationship with antibiotics
- 2. Current knowledge and understanding of AMR and resistance**
3. Reactions to different 'ways in' of talking about resistance
4. Current language and how it is understood

'AMR' means nothing to people – they can't even guess at what it stands for

When we ask about 'AMR' and 'antimicrobial resistance' we just get blank faces all round – even when we've just been talking about resistance more generally

I need a dictionary for that.

F, 40-60, no education past 16 years old,
Manchester

That sounds like something
made up.

M/F, 18-25, not at university, London

No idea.

M/F, 25-50, Mixed, Birmingham

I think my doctor gave me soap
that's that.

M/F, 18-25, at university, London

And 'resistance' is either not on the radar or misunderstood – everyone assumes it's the *person* that becomes resistant

Most don't really know what resistance is, but when they stop and think they imagine the body building up resistance not the bacteria – the idea that the more you take the less effective they'll be on you makes intuitive sense to many people and is hard to shake

Connections that make sense to people

Immunity

Think you're immune to it.
When you've had so much they just don't work anymore.

F, 40-60, C2DE, London

Tolerance

It's your tolerance level.
Your body has adapted to it.

M, 25-39, AB, London

Getting used to them

If you rely too much on antibiotics then your body gets used to them.

F, 40-60, no education past 16 years old, Manchester

If you take too much of anything then eventually you become immune to it.

M/F, 25-50, Mixed, Birmingham

The more you take, the more your body becomes resistant to it. They're not working any more.

M/F, 18-25, at university, London

There's also a bit of suspicion about the idea of resistance

There's a natural tendency to dismiss the idea – or to purposefully blank it out

Common misconceptions/ 'theories'

GPs/ NHS trying to
save money

Drug company
'conspiracy'

Scare story/
problem 'elsewhere'

Terms like superbug and superflu, they're there to induce concern in the public. It's a bit too much, we're becoming desensitised to it.

M/F, 18-25, at university, London

Doom and gloom, heard it all before, lies and media hype. You never see anything come of it all do you? It's scaremongering tactics.

M/F, 18-25, not university educated, Birmingham

You hear about GPs trying to cut down as they only have a certain pot of money. I'm a bit cynical really. Things seems to come into the media in line with what the government is doing.

F, 25-39, AB, Birmingham

If you walk around blind to everything it's the best way.

M/F, 25-50, Mixed, Birmingham

And there's a belief that 'they'/ scientists will sort it out before it becomes a real problem

At the end of the day, everyone assumes that the experts will work it out – they are confident that time and money will be spent to find a “cure” and that it will eventually all be “sorted”

What do you think will happen?

The experts are on it

There's always been advancements. In years to come they'll advance more and find something. They found a cure for cancer which they never had before. They have so much money behind them, presume it will be sorted.

M/F, 18-25, at university, London

Time and money will be spent

They always have a plan B.

M/F, 18-25, at university, London

There are always going to be issues around something. If the drugs we don't have now don't deal with them then someone else will work overtime to find one that works.

F, 40-60, C2DE, London

There's always a cure

There's a cure for everything.

M/F, 25-50, Mixed, Birmingham

I know the best people in the world are working on it.

M/F, 18-25, at university, London

All of which means it's really hard to make it feel relevant to the individual – and that's one of the biggest battles

Body becomes resistant
– I don't take them very often so it won't affect me

Sceptical/ 'elsewhere' –
never going to impact me / my family within my lifetime

The girl who takes them all the time might become resistant but not people like us.

M, 40-60, C2DE, Birmingham

Sensationalist. Don't believe the hype.

M/F, 40-60, C2DE, London

When people really understand resistance and ‘get it’ it makes a difference – but it’s really difficult to grasp

What is antibiotic resistance?

Antibiotic resistance is the ability of bacteria to resist the effects of an antibiotic. Antibiotic resistance occurs when bacteria change in some way that reduces or eliminates the effectiveness of drugs designed to cure or prevent infections. The bacteria survive and continue to multiply causing more harm.

Why should I be concerned about antibiotic resistance?

Antibiotic resistance has been called one of the world's most pressing public health problems. Almost every type of bacteria has become stronger and less responsive to antibiotic treatment when it is really needed.

A common misconception is that a person's body becomes resistant to specific drugs. However, it is bacteria and other microbes, not people, that become resistant to the drugs. If a bacteria is resistant to many drugs, treating the infections it causes can become difficult or even impossible. And these antibiotic-resistant bacteria can quickly spread from person to person – in this way a hard-to-treat illness can be spread through the community.

Antibiotic resistance can also mean that children and adults who have common infections, once easily treatable with antibiotics, can no longer be treated.

We read out this explanation of resistance in the groups, and it was often a watershed moment, the moment when a general sense of resistance being irrelevant/ not really worth worrying about switched to genuine worry and concern.

But we often had to read it several times and discuss it with people before they understood it – it’s difficult for them to get their head around and many never quite get there – they revert to the person becoming resistant five minutes later...

And some then struggle with what they personally can really do about it

Very few people self-identify as someone who badgers their GP for antibiotics, most think *they* only use them when they need them. And some then find the actions they personally can take to help address resistance – taking antibiotics as prescribed and general bacteria control/ hygiene – feel a bit ‘limp’

I still think I'd take my antibiotics, it is still the last resort. This doesn't change that. I will still fight my battle for my son. Maybe I'd think twice now, but if I'm honest I'd probably still want antibiotics.

F, 40-60, no education past 16 years old, Manchester

There's nothing I can do about it, is there?
What can I do except worry about it?

M, 40-60, C2DE, Birmingham

Because we don't abuse them there's not much we can do.

M/F, 30-40, first time parent, university educated, London

[Anything you can do?] Not really. Stay healthy, keep hands clean, use anti-bac gel.

F, 40-60, left school at 18, London

I don't feel any personal responsibility as I don't overuse them. GPs are accountable, drug companies are accountable. I think the government ultimately has to take control. The public aren't really to blame, people are very reliant on the doctor now, so the doctor is responsible.

F, 40-60, no education past 16 years old, Manchester

I don't think there is anything we can do. It is something people should be made more aware of, but as one person it is limited in what they can do.

F, 33, pre-family, university, Polish

What's the point in bringing this to people's attention if they can't fix it.

F, 40-60, C2DE, London

Findings

1. People's relationship with antibiotics
2. Current knowledge and understanding of AMR and resistance
- 3. Reactions to different 'ways in' of talking about resistance**
4. Current language and how it is understood

We explored a number of 'ways in' to talk about resistance, including those most commonly used now

As big a threat as climate change

Antibiotic resistance more of a threat to world than climate change

AMR and climate change: two global problems only set to get bigger in the future

Incredible cost to the world economy

Drug-resistant infections could cost the global economy \$100 trillion by 2050

Antibiotic resistance is a serious threat, one that could cost the European economy \$15 trillion by 2050

Huge numbers of predicted deaths

Resistance to antimicrobial drugs already causes an estimated 700,000 global deaths annually

Drug-resistant infections could lead to 10 million extra deaths a year globally

Superbugs can't be treated with antibiotics

Fatal superbugs: Antibiotics losing effectiveness

Use of antibiotics helping to create new drug-resistant superbugs

Negative side effects of taking antibiotics

Antibiotics kill your body's good bacteria and leave you more susceptible to infections

Study suggests possible link between taking antibiotics and diabetes

Severity of minor ailments hugely increased

Doling out too many antibiotics 'will make even scratches deadly' if they become infected

AMR makes something as simple as an insect bite potentially life-threatening if infected

Worrying implications for regular surgery

Routine operations like hip replacements or organ transplants could be deadly because of the risk of infection

Caesareans depend on antibiotics being available to prevent infections

Staphylococcus aureus (MRSA)



Illness caused: pneumonia, and other infections

Acinetobacter baumannii



Illness caused: Urinary Tract Infection, skin or wound infection, meningitis

Neisseria gonorrhoeae



Illness caused: gonorrhoea

Streptococcus pyogenes



Illness caused: sore throat, skin disorders

Clostridium difficile



Illness caused: diarrhoea

Escherichia coli (E.coli)



Illness caused: severe food poisoning

The big figures around financial cost or number of lives lost have minimal impact – they're meaningless to people

Huge numbers of predicted deaths

Drug-resistant infections could lead to 10 million extra deaths a year globally

Resistance to antimicrobial drugs already causes an estimated 700,000 global deaths annually

Impossible to grasp or make real; feels foreign

Still don't think it'll happen to you.

F, 40-60, C2DE, London

I don't believe it. That's a lot of people, just from bacteria. There's been a health boom in our society. That sounds dramatic.

M/F, 18-25, at university, London

Doesn't humanise it. You can't even imagine that many people. It distances you from the problem.

M/F, 18-25, not university educated, London

That's globally. It's huge numbers but not in the UK. Think it's a bit misleading.

F, 40-60, C2DE, London

Where do they get these numbers from?

M/F, 18-25, at university, London

Incredible cost to the world economy

Drug-resistant infections could cost the global economy \$100 trillion by 2050

Antibiotic resistance is a serious threat, one that could cost the European economy \$15 trillion by 2050

Impossible to grasp or make real; feels foreign

Doesn't ring home to me. That sort of number, you can't quantify it in your head. Seems like a silly number.

M/F, 18-25, at university, London

It's not true. The numbers are so big it just seems ridiculous. How many noughts on the end of a trillion?

M, 40-60, C2DE, Birmingham

What does it mean on a personal level, what does it mean to each of us and our families.

M/F, 18-25, at university, London

What's a million? And what's a dollar? It's not in pounds and it's more money than I'm ever going to have.

M/F, 25-50, Mixed, London

The analogy to climate change is equally ineffectual and superbugs doesn't fare much better, though chimes with a few

As big a threat as climate change

Antibiotic resistance more of a threat to world than climate change

AMR and climate change: two global problems only set to get bigger in the future

No impact – because most have dismissed climate change

Climate change was a massive thing ages ago. Even though it's still happening now you forget about it. You don't really care.

M/F, 18-25, not university educated, London

Totally irrelevant. It hasn't been going on for yonks and yonks.

M, 25-39, AB, London

I wouldn't link it with anything that isn't medical.

M, 40-60, C2DE, Birmingham

No matter how long it takes, we won't be there.

M/F, 18-25, not university educated, Birmingham

Superbugs can't be treated with antibiotics

Use of antibiotics helping to create new drug-resistant superbugs

Fatal superbugs: Antibiotics losing effectiveness

Many connect to Ebola/ swine flu which they dismiss, hard to 'get'

Not really phased by it. Ebola didn't really affect me or many people in London, so I'd think it won't happen to me anyway.

M/F, 18-25, not university educated, London

I think of superbugs as swine flu and things.

F, 25-39, AB, Birmingham

Quite worrying but doesn't have any personal story in it so I don't really connect myself with it. Think I'm not going to get it.

M/F, 18-25, not university educated, London

Makes me think of something we have to fight.

F, 25-39, AB, Birmingham

Implications for surgery / minor ailments have more impact, once people 'get' them, and side effects works for some

Worrying implications for regular surgery

Routine operations like hip replacements or organ transplants could be deadly because of the risk of infection

Caesareans depend on antibiotics being available to prevent infections

Works because it might happen to me, once people understand the need for antibiotics

I wouldn't have thought about antibiotics for these anyway.

F, 40-60, C2DE, London

This is going to affect us all. My dad had a hip replacement and infection. This resonates much more.

M/F, 18-25, at university, London

Severity of minor ailments hugely increased

Doling out too many antibiotics 'will make even scratches deadly' if they become infected

AMR makes something as simple as an insect bite potentially life-threatening if infected

People have to work too hard to make the link, though impact there if they do

Sounds very dramatic. There's nothing that bad in this country insect-wise.

M/F, 18-25, not university educated, Birmingham

I know how common it is to get an infected insect bite, I've had that before. Makes it a lot more concerning.

M/F, 18-25, not university educated, London

Negative side effects of taking antibiotics

Antibiotics kill your body's good bacteria and leave you more susceptible to infections

Study suggests possible link between taking antibiotics and diabetes

Doesn't get to resistance but does help some think again about taking antibiotics

Makes you question if you really need them, they're killing off something that makes you more susceptible to viruses. But might make people not finish their course more often.

M/F, 18-25, not university educated, Birmingham

It's only when we get into the detail of the individual 'superbugs' that people really stand to attention

Staphylococcus aureus (MRSA)



Illness caused: pneumonia, and other infections

Neisseria gonorrhoeae



Illness caused: gonorrhoea

Clostridium difficile



Illness caused: diarrhoea

Escherichia coli (E.coli)



Illness caused: severe food poisoning

Acinetobacter baumannii



Illness caused: Urinary Tract Infection, skin or wound infection, meningitis

Streptococcus pyogenes



Illness caused: sore throat, skin disorders

People have heard of most of these bugs, and can imagine them/ someone they know getting one of them, so they make it all feel real

It makes a difference. Superbugs is a blanket term that doesn't really enter my head, swine flu etc. But E. Coli, it could affect you.

F, 40-60, C2DE, London

The sore throat one, I don't want it for the rest of my life. Superbugs, they'll never happen to me, but these are quite common so they hit home a bit more.

M/F, 18-25, at university, London

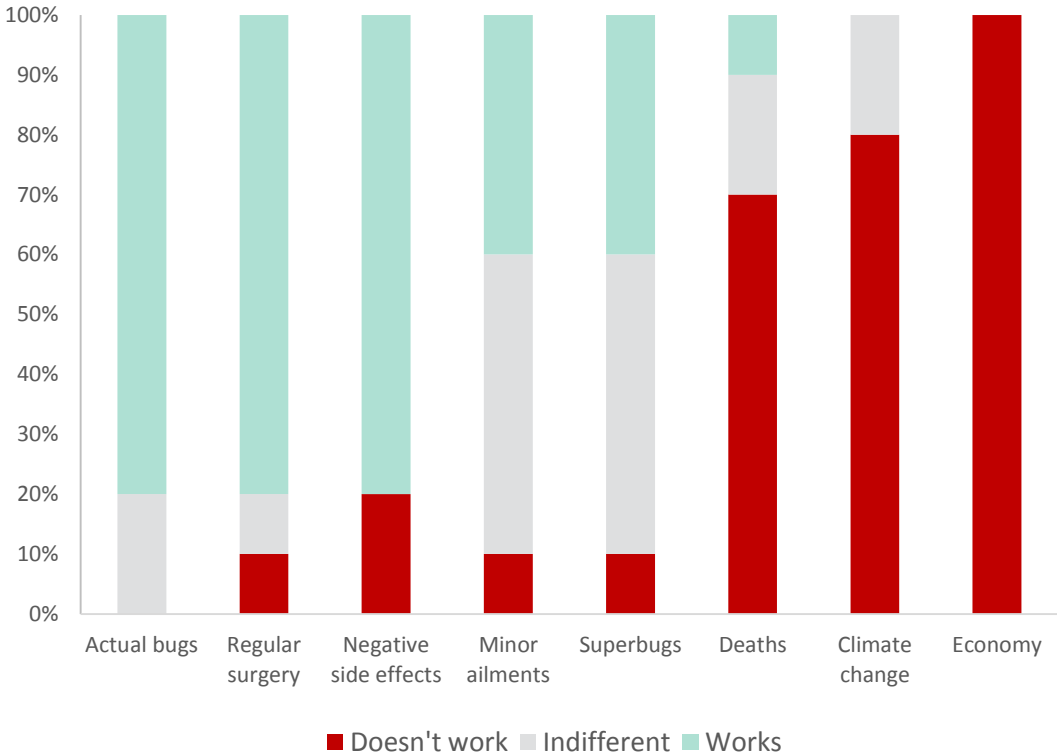
MRSA is really big in hospitals. Gonorrhoea is going around young people. It makes you think.

M/ F, 18-25, at university, London

Would be awful for UTIs. Antibiotics are the only thing that works.

M/F, 18-25, not university educated, London

When we compare the impact of all the 'ways in' we see a clear and consistent picture



And this was reinforced by reactions we saw when we showed people recent newspaper headlines



It creates public fear. Terms like 'superbug' and 'superflu', they're there to induce concern in the public. It's a bit too much, we're becoming desensitised to it.

M/F, 18-25, at university, London

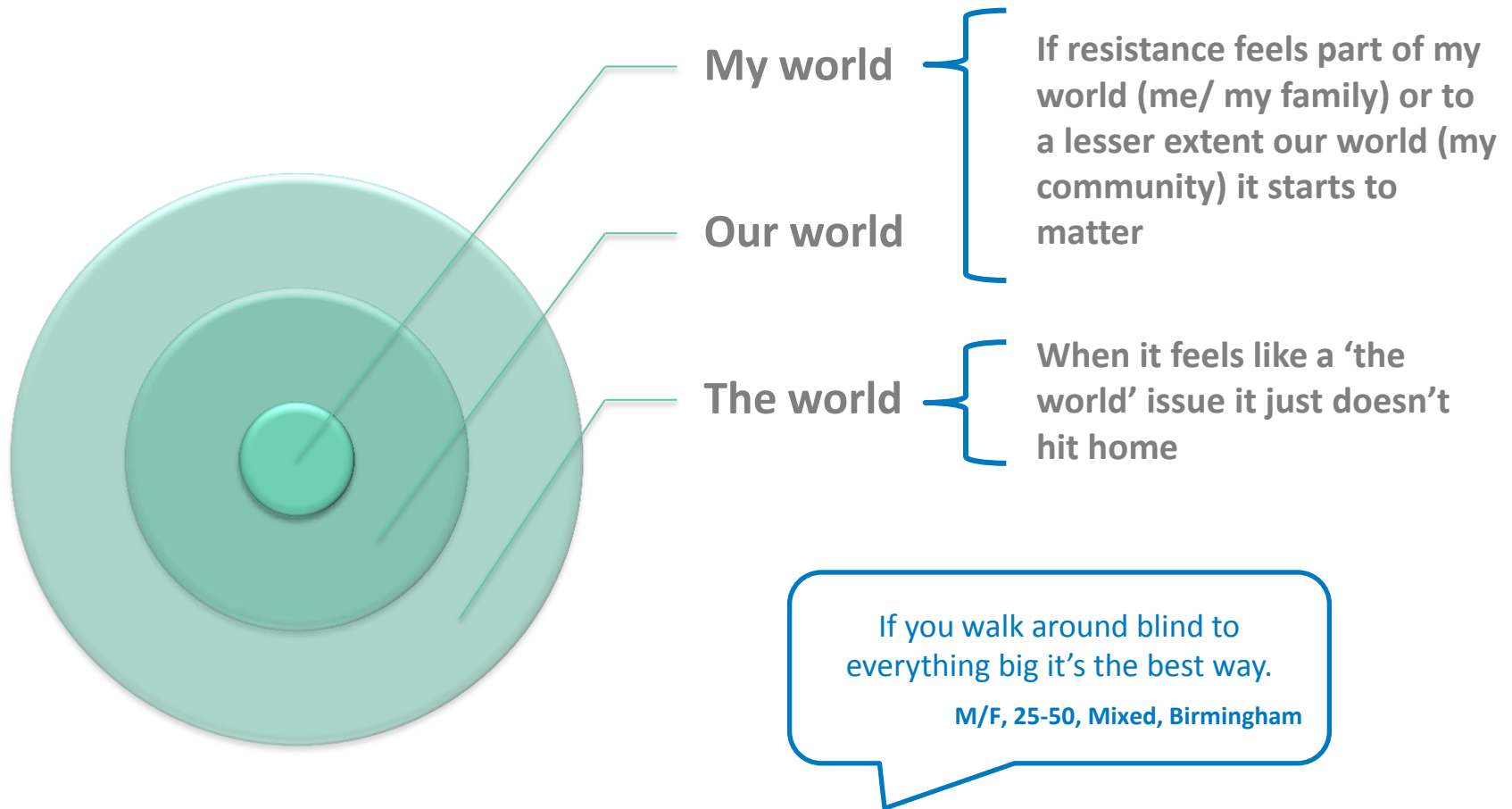
The media are negative about everything. It's always the worst case scenario. Bird flu, then SARS, they're going to kill us all.

M, 25-39, AB, London

It's scaremongering. Where do they pluck the numbers from? All a bit vague. Where have they got 80,000 from?

M/F, 25-50, Mixed, Birmingham

It's only when it feels direct, personal and relevant that people take note



Findings

1. People's relationship with antibiotics
2. Current knowledge and understanding of AMR and resistance
3. Reactions to different 'ways in' of talking about resistance
- 4. Current language and how it is understood**

'Antibiotic resistance' is not a term that people instantly understand

It doesn't take people to the right place, and it doesn't help overcome misconceptions

Issues with the term

Doesn't suggest the bacteria are becoming resistant

Doesn't make intuitive sense to people

Doesn't sound that bad to people

Resistance. We knew what the word meant but we didn't understand what it was resisting. It's a bit of a flip flop term as you think of resisting a bug as being good.

F, 25-39, AB, Birmingham

Resistance makes it sound like there's still a chance it might work, it's not completely hopeless. Whereas you're saying eventually it might become completely hopeless, so think that needs to be drummed home.

M/F, 25-50, Mixed, London

'Superbugs' has lost its impact, and there is a general reaction against 'sensationalist' language

Words become meaningless and people tend to 'glaze over' very easily; simple, plain language is preferred, the challenge then is cut through

Key challenges with language

Superbugs feels abstract/ dated/ confusing

'Panic' and shock puts people off

Making it relatable is crucial

Trying to scare with 'superbug'. I'd think, oh another thing we need to look out for.

M/F, 18-25, at university, London

I wish they'd just say 'worrying'. It's not so sensationalist.

F, 40-60, C2DE, London

Say one in whatever gets this. For cancer it works well.

M/F, 18-25, not university educated, Birmingham

I always think of super as a good thing. My child would be thrilled if he had a 'super' bug.

F, 25-39, AB, Birmingham

Use simple language. Don't talk in billions or trillion or superbugs. We've heard it all before.

M/F, 25-50, Mixed, London

Language that focuses on the bacteria (or the illness?) and the implications may have more impact with people

Bacteria / illness

Makes it real and helps get over the 'person becoming resistant' issue

Antibacterial resistant illnesses
M,40-60, C2DE, Birmingham
(Written reply to question 'how would you explain it' at end of session)

'Stronger'

Thinking about bacteria becoming stronger makes intuitive sense to people

You could die from E. Coli that's resistant to antibiotics
M, 25-39, AB, London
(Written reply to question 'how would you explain it' at end of session)

Got to use plain language – the bacteria that is going around is getting stronger.

M, 40-60, C2DE, Birmingham

Drugs/ medicine don't work

The idea of medicine 'not working' hits home with people

Antibiotics work no more
M/F, 18-25, not university educated, Birmingham
(Written reply to question 'how would you explain it' at end of session)

SUMMARY OF KEY INSIGHTS

Summary of key insights

- 1 Getting antibiotics means you've got a 'real' illness – it's 'proof' you're ill
- 2 Antibiotics make you better, and mean the trip to the doctor was 'worth it' – so many see them as the 'perfect solution' and will take them without hesitation
- 3 Some are more reluctant – this often stems from understanding the impact they have on your body ('good bacteria') and/or preferring 'natural' options
- 4 AMR means nothing to people and resistance is only on the radar of a few
- 5 The concept is very hard to grasp – and nearly everyone assumes it's the person not the bacteria becoming resistant – though when it's understood it has impact
- 6 Making it feel relevant and real and part of 'my world' is vital, and the 'ways in' most regularly used (cost/ deaths) do not achieve this; specific bugs have more impact
- 7 The language of 'antibiotic resistance' and 'superbugs' doesn't help – the challenge is to find simple, clear language that focuses on illness and implications

WHAT WE LEARNT FROM DOCTORS

Before starting the groups, we completed our interviews with GPs

GPs: one hour telephone interview with GPs across the UK

Date	Location	Size of practice	Patient population	Status
05/02/15	South Wales (urban)	Small (4,000 patients)	Largely elderly and working class.	Complete
05/02/15	Birmingham (urban)	Medium (6,000 patients)	Largely poor or deprived social backgrounds. Large immigrant population.	Complete
05/02/15	London (suburban)	Large (7,000 patients)	Mixed – immigrant, elderly, poor or deprived and affluent.	Complete
11/02/15	South West (rural)	Large (11,000 patients)	Mixed – affluent and deprived.	Complete
12/02/15	Scotland (urban)	Large (7,000 patients)	Largely elderly, from largely poor or deprived backgrounds.	Complete
17/02/15	North East (suburban)	Large	Poor and deprived	Complete

The doctors gave us another perspective on the doctor-patient interaction at the time of appointment

Discussions around antibiotics are a dominant theme in doctors' surgeries

Antibiotics come up often during appointments

Understanding of what they're used for and how they work is low

Side effects don't come up that often

Perception that many don't always finish the course

A third will expect antibiotics [...] some will need them and some I try to convince that it's a viral infection, but if they insist then we just give them.

Large, suburban, London

It can be hard to say no – some patients are fixed on getting them

There tend to be some that insist – often those that are acting on behalf of someone else

People want them because they offer 'validation' that they're ill

Previous experience is a really important factor

Perception that some think the reason the doctor is not prescribing them is to cut cost

The biggest factor is whether they received antibiotics last time for the same thing. They are the hardest to convince.

Medium, urban, South West

And across the course of the interviews, differences in approach emerged

Within surgeries, some doctors are more willing to prescribe than others, and patients know this

Some practices are part of local initiatives, while others have addressed prescribing rates themselves

While some GPs are keen for any help they can get, others think they've 'nailed it'

Part of a prescribing initiative from the old PCT NICE strategy and PHE. We shared best practice within the city and signed up to a scheme results were audited on a quarterly basis. The act of auditing switched our attention.

Medium, urban, Birmingham

[What would be most helpful?]

An increase in general awareness of antibiotic resistance. Public health education.

Small, urban, South Wales

We don't need anything because we have it nailed. We're one of the lowest prescribing surgeries, we get quarterly figures.

Large, urban, Scotland

A FEW THOUGHTS ON IMPLICATIONS

The findings of the research do seem to have some relatively far-reaching implications

As we reflect on what we've learnt, the following four things stand out

- 1 The current language needs to change – AMR is meaningless and 'antibiotic resistance' does not take people to the right place
- 2 The focus of the resistance 'story' for the general public needs to shift away from macro factors such as number of deaths, cost to the economy and epidemics/ pandemics
- 3 There is a need for a communications campaign for the public which makes the issue feel real and relevant, so that the tide of opinion is behind taking action
- 4 Doctors (and dentists) are key – while more research may be needed it appears there is a need for a behaviour change programme for doctors which provides clear guidelines and targets around when to prescribe antibiotics, and advice on how to manage patients

1

The current language needs to change – AMR is meaningless and ‘antibiotic resistance’ does not take people to the right place

- The chasm between current public awareness and understanding and the term ‘AMR’, or ‘anti-microbial resistance’ too big to close
- ‘Antibiotic resistance’ should not replace it as the short-hand as it doesn’t help people understand the issue or make intuitive sense to people
- One simple option, which would make a difference, is to add ‘infection’ (or ‘bacteria’) to ‘antibiotic resistance’ this would help, particularly in combination with a broader awareness campaign

FROM

- AMR
- ANTIMICROBIAL RESISTANCE
- ANTIBIOTIC RESISTANCE

TO

- ANTIBIOTIC RESISTANT
INFECTIONS

2

The focus of the resistance 'story' for the general public needs to shift away from macro factors such as number of deaths, cost to the economy and epidemics/pandemics

- At the moment, people 'blank out' most of the headline stories about resistance - they feel sensationalist, lack personal relevance, and are often set in the future
- The challenge is to drive immediacy and bring resistance into 'my world'
- The best 'ways in' are those that make people feel 'this could happen to me'
- Driving understanding of the impact taking antibiotics has on your 'good bacteria' may have a part to play too – it doesn't get to resistance but does give people a 'real' reason not to take too many of them

FROM

- GLOBAL ECONOMY
- TOTAL NUMBER OF DEATHS
- FUTURE DATES - 'BY 2020'
- RISK OF EPIDEMICS AND PANDEMICS

TO

- SPECIFIC, RECOGNISABLE & FAMILIAR BUGS AND THE ILLNESSES THEY CAUSE
- HOW IT MIGHT AFFECT A COMMON SURGERY, EXPLAINING THE ROLE ANTIBIOTICS PLAY
- THE IMPACT ANTIBIOTICS HAVE ON YOUR GUT AND 'GOOD BACTERIA'

3

There is a need for a communications campaign for the public which makes the issue feel real and relevant, so that the tide of opinion is behind taking action

- The more resistance is on people's radar and understood, the more momentum will build for action from all stakeholders – from doctors to government to pharma companies to international bodies
- This can also help ease the 'prescription conversation' in the doctor's surgery and increase the extent to which people take antibiotics as prescribed
- It does feel more like communications than behaviour change though – as while the public clearly have a role to play, the actions they can take are relatively limited

ILLUSTRATIVE CAMPAIGN GOALS

- Help people grasp the (complicated) concept of resistance
 - Take on the person/bacteria misconception directly
- Get people to realise you can be really ill and not need antibiotics
 - Make them feel that everyone else will understand that
- Help people understand the personal negative implications of taking antibiotics

4

Doctors (and dentists) are key – while more research may be needed it appears there is a need for a behaviour change programme for doctors which provides clear guidelines and targets around when to prescribe antibiotics, and advice on how to manage patients

- Our research focused primarily on the public, not doctors, but the interviews we did with them makes it clear they need help and guidance
- And they are at the ‘coal face’ of the issue – and this is something people bring up, running campaigns for doctors **and** the public would make sense for people and the two would be mutually reinforcing
- For doctors, it is a clear behaviour change challenge – there are a number of actions that need to be taken, the frame of behaviour needs to be reset

This is supported by a report recently published by Public Health England and the Department of Health: ‘Behaviour change and antibiotic prescribing in healthcare settings Literature review and behavioural analysis’ (Feb 2015):

Considerable opportunities are apparent from the analysis of the public and patient aspects. Building awareness is likely the first step in addressing the public’s behaviour. This type of work lends itself more to social marketing based approaches than perhaps behavioural science. The costs of any campaign are likely to be significant. The picture to emerge from primary care is more promising. The healthcare environment offers a range of opportunities to intervene in workflows and with professionals. The high rate of prescribing and ability to collect meaningful behavioural outcomes is attractive insofar as trials of the interventions might be feasible.