

Wellcome Monitor Report 2018

Wave 4

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NatCen

Social Research that works for society



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1 Introduction

1.1 Executive Summary

Public interest and engagement with health research

The public cares about health research. Most people were interested in health research, with women more interested than men, and older people more interested than younger people. A majority of people engaged with health research, whether by having a conversation or reading about it, or by sharing and commenting on it on social media.

People are more interested in the substantive areas of health research than in ethical and regulatory issues. For example, interest was highest in the development of new drugs, vaccines and treatments and how the brain works and lowest in policy and funding issues and how research is regulated.

Of the different areas of health research, the public remain most interested in mental health. This was followed by genes and how they affect health and disease and ageing.

Sources of health-related information

The web is the most commonly used source of health information for all age groups except the over 70s. Social media was particularly widely used as a source of health information amongst younger people and those on lower incomes.

Use and trust in sources of health information varies. Health professionals and the media were the most used sources, but most people had high trust in health professionals whereas as very few trusted the news and media. Academics were highly trusted by the minority of people who used them as source of health information.

Few actively engage with health research on social media. Whilst reading and following links to health research on social media was not uncommon, only a minority engaged and interacted with health research actively by posting, sharing or commenting on content.

Decisions about health

Young people and older people differ in how they make decisions about their own health. Younger people were more likely to make decisions about their own health by looking up information and research, whereas older people were more likely

to follow the advice of health professionals. However, older people were more confident in challenging the advice of GPs and medical professionals.

Priorities for research

Most people say medical research should be a higher priority for research funding than other areas, including environmental protection, understanding social issues, military/defence and economic affairs.

A majority of the public think that all types of people should be involved in setting health research priorities. People were most likely to say that scientists working in universities should be involved, and least likely to say that members of the public should be.

The public are divided on whether scientists are interested in their views when setting health research priorities. Just under half said they neither agreed nor disagreed that scientists were interested in the views of the public, with 35 per cent agreeing or strongly agreeing, and 22 per cent disagreeing or strongly disagreeing.

Data sharing

The public trust researchers with their data. A large majority of people said they were willing to share their medical records, information about their genes, and information about their mental health for use in health research.

Mental health research

Depression and anxiety are the most salient types of mental health problem. When people were asked to describe how they understood the term 'mental health problem', these were the most commonly mentioned conditions.

Many people do not have a clear sense of what mental health researchers do. When asked what mental health researchers do, over half either did not know or gave a vague answer. Younger people were more able to articulate a clear view on what mental health researchers do than older people.

Drug resistant infections and vaccines

Drug resistant infections are seen as a major threat to public health. Drug resistant infections were seen a bigger risk to public health than air pollution, high sugar content in food, people not getting vaccinated, and climate change.

Misunderstanding of what antibiotics can treat is high. While a majority of people correctly agreed that antibiotics can be used to treat bacterial infections, a majority incorrectly thought they can also be used to treat viral and fungal infections.

Most people feel that the best way of addressing DRIs should be to encourage people to use antibiotics correctly. The responsibility for doing this was most commonly felt to reside with doctors and nurses who prescribe antibiotics. However,

there was also a widespread view that members of the public can have some impact on DRIs through changing their behaviour.

People routinely seek to obtain antibiotics from medical practitioners. Around 4 in 10 people had asked a medical professional for an antibiotic prescription. A small proportion had managed to persuade the medical professional to prescribe them antibiotics.

The public over-estimates the risk of side-effects from vaccines. People correctly identified that vaccines are more effective at prevention than treatment but a small minority thought that the risk of side-effects was high.

1.2 Background

This report describes the results from the fourth wave of the Wellcome Monitor, a study of the British adult population's awareness of, knowledge of, engagement with, and attitudes towards, science and health research, conducted by the National Centre for Social Research (NatCen) on behalf of Wellcome.

Wellcome is charity that has worked for over 75 years to fund biomedical research and support the public's understanding of science. Wellcome is now the United Kingdom's largest provider of non-governmental funding for scientific research. A key objective for Wellcome is to encourage the public to understand, engage with, and use science and health research. The Wellcome Monitor helps provide understanding about the societal context in which science and research funding operate, and on how this context is changing over time. Since 2009, the Monitor has provided high quality estimates of public attitudes towards science and health research, with surveys run in 2009, 2012, and 2015¹.

In December 2018, the fourth wave of the Monitor was conducted by NatCen. The main purpose of the Wave 4 Monitor, as with previous waves, was to provide insight and evidence to support the work of Wellcome's public engagement team and for use by stakeholders outside of the organisation by providing a barometer on changing attitudes to science and research.

The stated aim of the Public Engagement team at Wellcome² is that its work with the public creates tangible change that is beneficial both to them and research. It aims to stimulate the conditions that enable the public to play their role in research, such as getting involved in science as a cultural or leisure pursuit, steering research priorities, or getting involved in the production of research, so that research translates to value for the public that improves their health.

This year's Monitor questions aimed to help understand where the public currently sit in relation to these goals. Wellcome want to know how people seek out and engage with health-related information, what sources they trust and whether there are patterns across different groups within the population. Compared to previous years the

¹ Available at <https://wellcome.ac.uk/what-we-do/our-work/public-views-science-and-health>

² <https://wellcome.ac.uk/what-we-do/our-work/public-engagement>

emphasis in the questions has changed from *medical research* to *health information*, since this term was felt to be more relevant for a majority of people.

Social media is increasingly where people are likely to engage with health information and where they connect with communities of people similar to them. The public engagement team want to understand these social media interactions to see how important a space this is and whether there are clear trends for different groups. This will ultimately help the public engagement community operate more effectively in these spaces.

The team also want to understand more about public involvement in research – do members of the public want to be involved, and do they believe they have a role to play in steering the focus of health research? Do they believe that those who are in charge of research are interested in what they think?

Understanding these issues together with attitudes to areas defined as a priority for Wellcome such as vaccines, drug resistant infections and mental health gives a helpful steer on where more effective public engagement is needed. For example, this year's survey showed that people of all levels of education were interested in health research, but there are varying degrees of participation and different ways of getting information that can support public engagement.

To this end, the Wave 4 questionnaire (see Appendix B) included questions on the following areas:

- *Engagement with health information.* Levels of interest in and engagement with health information and research, sources of health information used, degrees of trust in those sources, how people make decisions about their own health, and their confidence in challenging the advice and opinions of health professionals.
- *Public involvement in research.* Perceptions of the extent to which the public should be involved in setting health research priorities, perceptions of the extent to which scientists consider the views of the public, and public opinions of what the government's research funding priorities should be.
- *Sharing information.* Willingness to share health information for research purposes.
- *Public health concerns.* Perceptions of the risk of potential public health threats, knowledge of, and attitudes towards, antibiotics and drug resistant infections (DRIs), and knowledge and attitudes towards vaccinations.
- *Mental health.* Understanding of mental health problems, what mental health research aims to achieve, and what mental health researchers do.

This report provides a comprehensive description of the findings of the survey, outlining the distribution of attitudes and behaviours in the general population. The analysis looks at how these distributions differ between key groups of interest, including those who have experienced mental health problems, or who have caring responsibilities. Additionally, the analysis looks at associations between answers to key survey questions, such as whether those who have less understanding about the uses of antibiotics are more or less likely to try to persuade their GP to write a prescription for antibiotics.

1.3 Methodology³

The fourth wave of the Monitor was conducted on the NatCen Panel. Members of the NatCen panel are recruited from the British Social Attitudes survey (BSA), which randomly selects participants aged 18 or over across Britain. For the Monitor, panellists who joined in 2017 and 2018 were invited to take part. Panellists were initially invited to take part online, before being contacted by telephone if they had not completed the survey after two weeks. A £5 gift card was sent as a ‘thank you’ to those who participated.

Fieldwork ran from 16th November to 16th December 2018. A total of 4,775 cases were issued, and 2,708 interviews were achieved, giving a response rate of 57 per cent. When taking into account non-response at the BSA interview and then also at the point of recruitment to the panel, the overall response rate was 15 per cent.

Data have been weighted to be representative of the adult (18+) GB population. All estimates presented in this report have been tested for statistical significance at the 95 per cent level, and all differences between groups reported are statistically significant unless otherwise stated.

In several places in this report we comment on whether patterns are broadly the same as in previous Monitor waves. Caution must be used in making comparisons with previous waves: while Wave 4 was conducted online and over the phone, previous waves have all been conducted face-to-face. Differences in results may be affected by this interview mode change.

³ Further technical details regarding the methodology are provided in Appendix A.

2 Public interest in and engagement with health research

This chapter explores how interested people are in health research, and which areas of health research they are most interested in. The chapter then examines the ways in which people engage with health research.

Key findings:

- Interest in health research is high, with 82 per cent of people saying they were fairly or very interested.
- A majority of people (79 per cent) have engaged with health research by having a conversation about or reading about health research, sharing, retweeting or commenting on health research on social media, searching for information about health research, or participating in health research in the last year.
- Women were more interested in health research than men, with 88 per cent of women saying they were fairly or very interested, compared to 77 per cent of men. This higher level of general interest was reflected in the fact that women were more likely than men to be interested in almost all *broad* areas of health research, and almost all *specific* areas of health research, and was also reflected in the fact that women were more likely to have engaged with health research than men.
- Whilst older people were more likely to express interest in health research, younger people were more likely to have engaged with health research in the last year.
- People with long-standing health conditions that affect their day-to-day lives were more likely to be interested in the full range of *broad* areas of health research, and many *specific* areas of health research, although they did not express more interest in health research generally.
- Those who have experienced a mental health issue were more engaged with health research, and more likely to be interested mental health issues and how the brain works, although they did not express greater general levels of interest in health research.

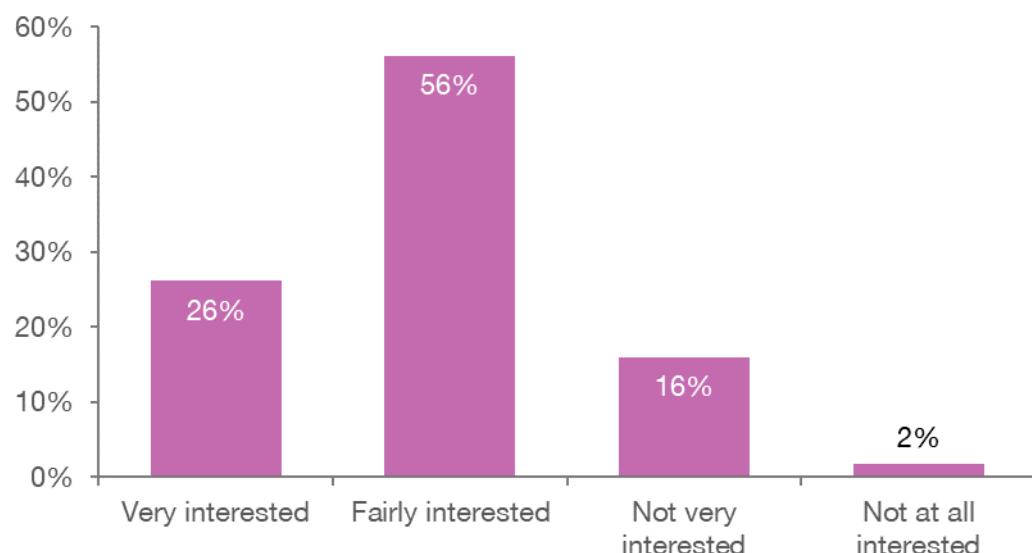
2.1 How interested are people in health research?

Respondents were asked their overall level of interest in health research, before being asked their level of interest in some broad areas of health research and some specific areas of health research. Before being asked these questions, respondents were given a definition of health research, in order minimise variation due to different interpretations of the term:

"When we use health research in this survey we mean the systematic investigation done by researchers to learn more about how the body works and the causes of illnesses, and to develop and test new treatments."

Overall interest in health research was high, with 82 per cent saying that they were either fairly or very interested in health research, and only two percent saying that they were not at all interested (Figure 2:1). This is similar to the high level of interest found in previous waves of the Monitor, although on previous waves respondents were asked how interested they were in *medical* research, rather than *health* research.

Figure 2:1 Overall interest in health research

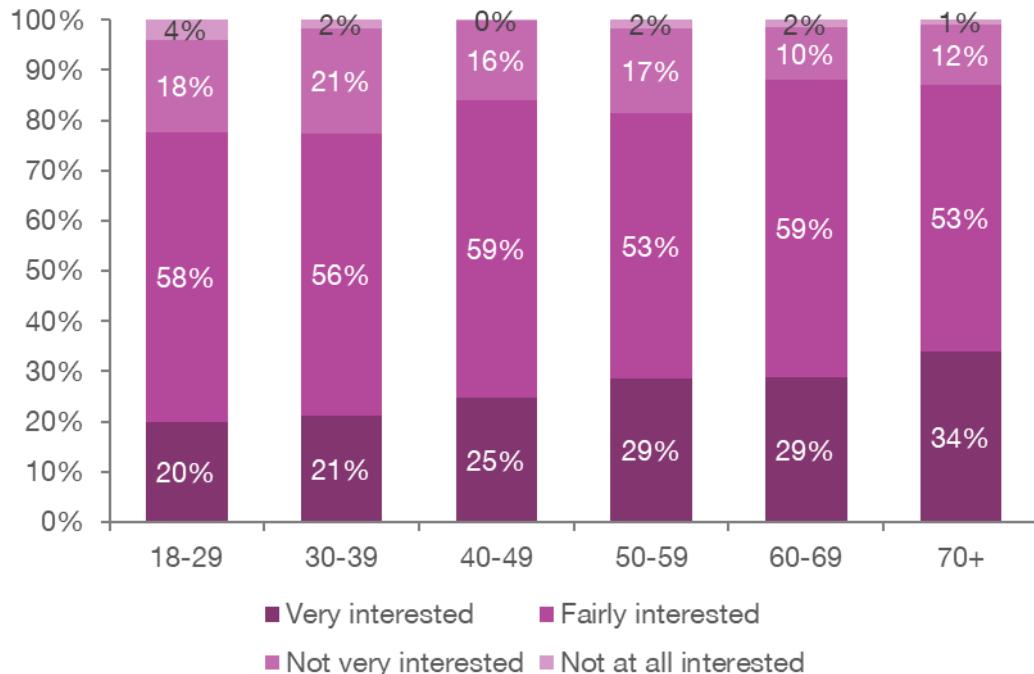


"How interested, if at all, would you say you are in medical/health research?"

Bases: all GB adults 18+ (2707).

Women were more likely than men to be either fairly or very interested in health research (88 per cent and 77 per cent respectively). Overall levels of interest in health research also varied by age. The proportion of people who said they were fairly or very interested rose from 77 per cent of those aged 18 to 39, to 87 per cent of those aged 70 or over (Figure 2:2).

Figure 2:2 Overall interest in health research, by age



"How interested, if at all, would you say you are in medical/health research?"

Bases: all GB adults 18+. 18-29 (237), 30-39 (447), 40-49 (459), 50-59 (508), 60-69 (536), 70+ (503).

While the proportion who said that they were fairly or very interested in health research did not vary significantly by highest level of qualification, the proportion who said that they were 'very interested' in health research did: eighteen per cent of those with qualifications below A level or vocational level 3 (or equivalent) were very interested, rising with educational attainment to 29 per cent of those with a degree (or equivalent) or above. However, 30 per cent of those with no qualifications reported being very interested in health research, challenging a simple association between educational attainment and interest in health research.

There was no statistically significant variation in degree of interest in health research by any of several measures of socio-economic status, including equivalised income, subjective income, class identity, and NS-SEC class.

We expected those who have a long-standing health condition that affects their day-to-day life to be more interested in health research than those who do not, but this was not the case. Similarly, there was no statistically significant difference in interest in health research between those who had experienced a mental health issue and those who had not.

There was no statistically significant variation in degree of interest in health research by ethnicity.

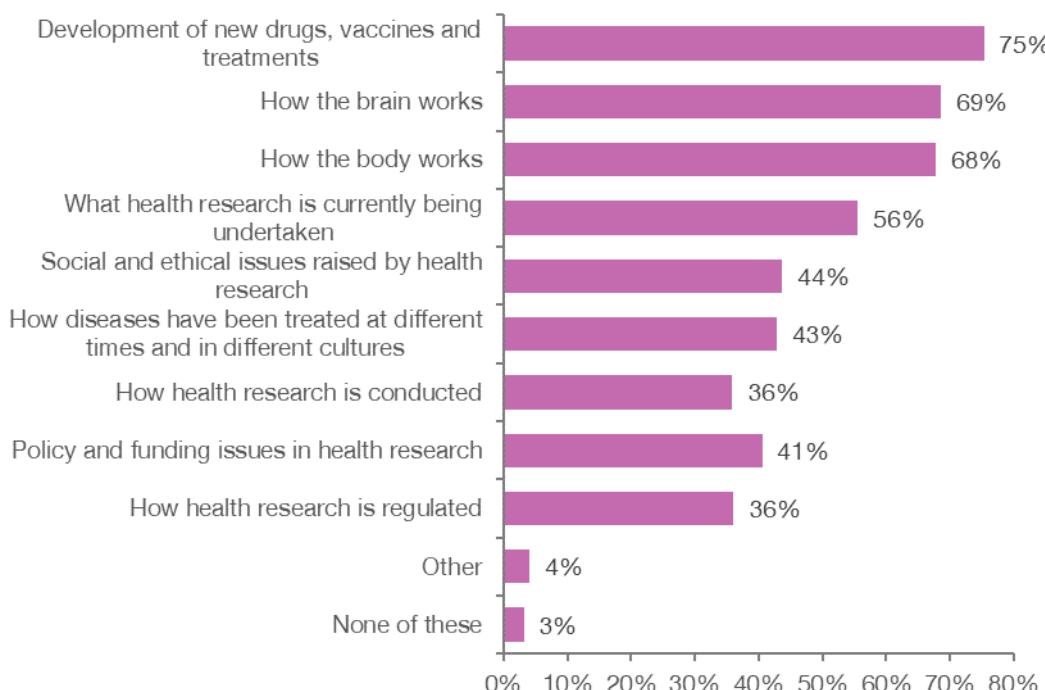
2.2 Which areas of health research are people interested in?

Respondents were asked to select which they were interested in from a list of *broad* areas of health research, before being asked to select which they were interested in from a list of *specific* areas.

2.2.1 Broad areas of health research

Figure 2:3 shows the proportion of people saying they were interested in each of a selection of *broad* areas of health research. Almost all (97 per cent) of people were interested in at least one of these areas. Overall, there was more interest in substantive areas of health research than in ethical and regulatory issues. This is a broadly similar pattern to Wave 3 of the Monitor, where people were most likely to say they were interested in development of new drugs, vaccines and treatments, how the body works, how the brain works and what health research is currently being undertaken⁴.

Figure 2:3 Interest in broad areas of health research



*"Below is a list of **broad** areas of health research. Which, if any, of these are you interested in?"*

Base: all GB adults 18+ (2708)

⁴ Wave 3 referred to *medical* research throughout, rather than *health* research.

The higher level of overall interest in health research reported by women than men is reflected across the full range of broad areas of health research. With the exception of how health research is regulated, women were somewhat more interested in all broad areas of health research, with statistically significant differences in the proportions of men and women interested in how the body works and how the brain works.

There were few broad areas of health research for which the level of interest varied by age, each reflecting patterns seen in Wave 3 Monitor:

- Seventy-eight per cent of those aged 18 to 29 were interested in how the brain works, compared to 66 per cent of all others.
- Those aged 70 or over were more likely to be interested in issues related to health research policy: 56 per cent of those aged 70 or over were interested in policy and funding issues in health research compared to 38 per cent of all others, and 46 per cent were interested in how health research is regulated compared to 34 per cent of all others.

There were few differences in interest in broad areas of health research by educational qualification:

- Those with no qualifications were less likely to be interested in what health research is currently being undertaken than those with qualifications (47 per cent and 57 per cent respectively).
- Those with no qualifications were also less likely to be interested in how the brain works (57 per cent) than those with qualifications.
- Those with a degree (or equivalent) or above were most likely to be interested in the social and ethical issues raised by research (53 per cent), falling to 29 per cent of those with qualifications below A level or vocational level 3 (or equivalent), but then rising to 37 per cent of those with no qualifications.

Although the 17 per cent of the population who had a long-term condition that affected their day-to-day life were no more likely to be interested in health research overall, they were more likely to express interest in all broad areas of health research than those with no long-term condition and those with a long-term condition that did not affect their day-to-day life.⁵

People who reported having experienced a mental health issue⁶ were more likely to be interested in how the brain works than those who had not experienced a mental health issue (72 per cent and 63 per cent respectively). Additionally, they were more likely to be interested in social and ethical issues raised by health research (47 per cent compared to 39 per cent), and how diseases have been treated at different times and in different cultures (45 per cent compared to 39 per cent).

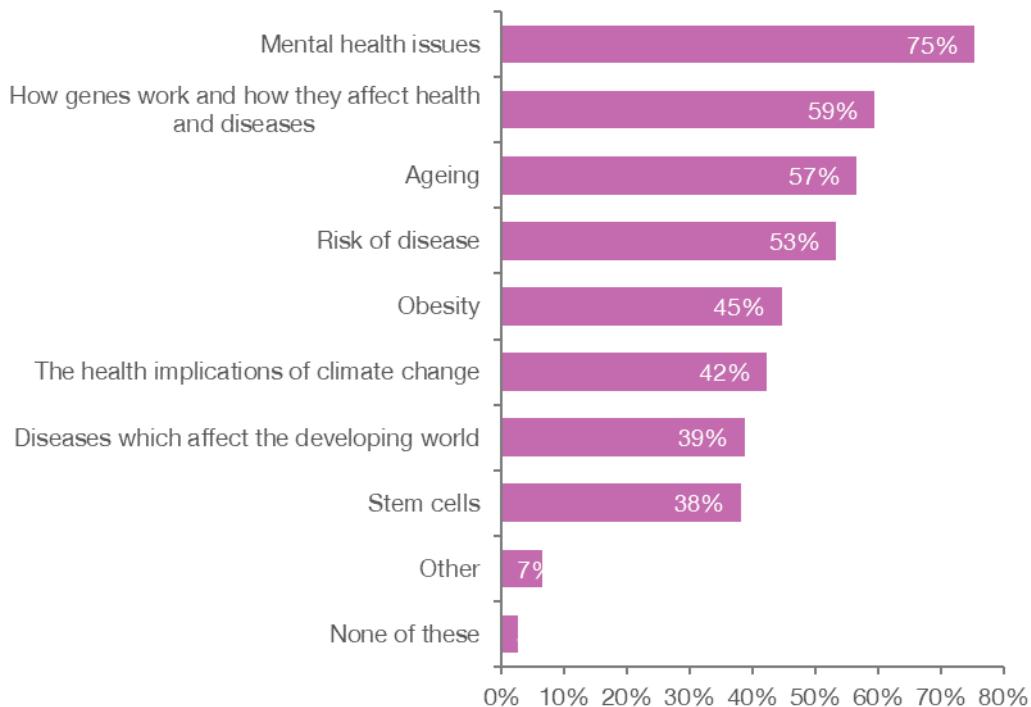
⁵ Differences in the proportion of people interested in social and ethical issues raised by health research, how the brain works and how the body works are not statistically significant.

⁶ This includes common mental disorders (such as anxiety disorders), serious mental illnesses (such as bipolar disorder), complex disorders (such as dementia), and alcohol or drug dependence.

2.2.2 Specific areas of health research

Figure 2:4 shows the proportion of people saying they were interested in each of a selection of *specific* areas of health research. As with the broad areas, almost everyone (97 per cent) was interested in at least one of the areas. As seen in previous waves of the Monitor, the proportion of people interested in research into mental health issues was greater than all other areas.

Figure 2:4 Specific areas of interest in health research

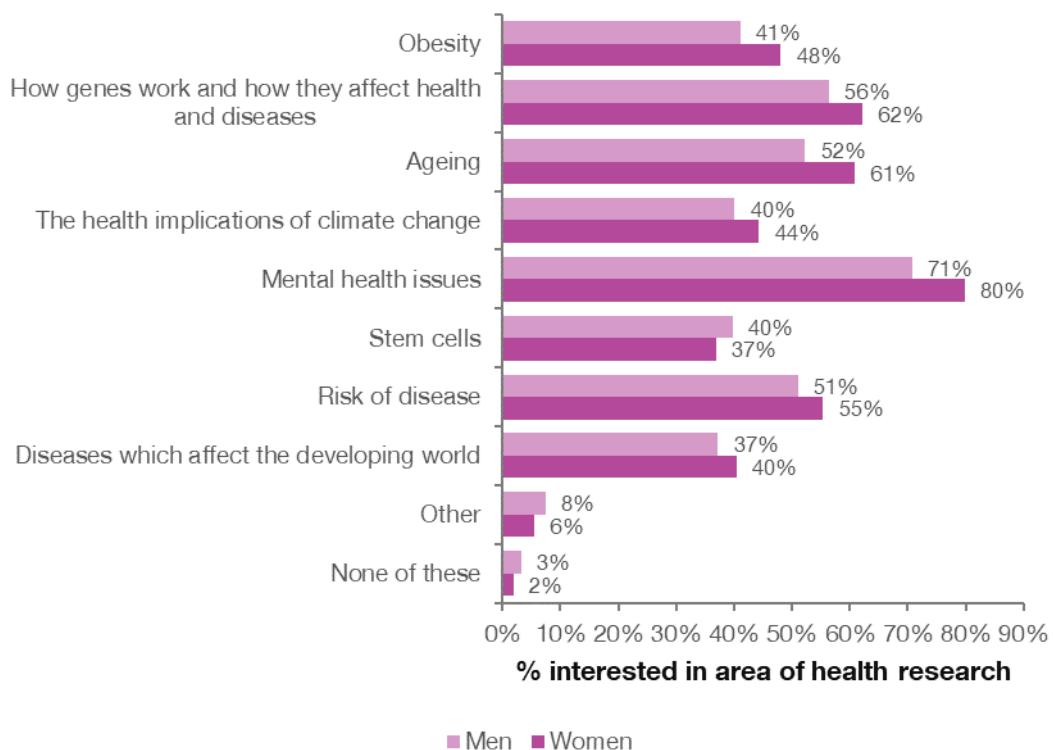


*"Below is a list of **specific** areas of health research. Which, if any, of these are you interested in?"*

Base: all GB adults 18+ (2708)

Similar to interest in broad areas of health research, the difference in overall levels of interest in health research between men and women is seen across nearly all of the specific areas of health research, with women more likely to be interested in mental health issues, ageing, obesity, and how genes work and how they affect health and diseases (Figure 2:5).

Figure 2:5 Specific areas of interest in health research, by sex



*"Below is a list of **specific** areas of health research. Which, if any, of these are you interested in?"*

Bases: all GB adults 18+. Men (1145), Women (1563).

The relationship between age and interest in specific areas of health research varied by area:

- Interest in research into ageing varied by age. Forty-five per cent of those aged 18 to 29 were interested in research into ageing, rising to 79 per cent of those aged 70 or over.
- Interest in research into the health implications of climate change was highest amongst those aged 18 to 29 (51 per cent) and those aged 70 or over (49 per cent), and significantly lower for age groups in-between (38 per cent).
- Interest in research into diseases which affect the developing world was significantly higher amongst those aged 18 to 29 (51 per cent) than those aged 30 or above (37 per cent).
- Interest in research into mental health issues was high but dropped off amongst those aged 60 or over: 68 per cent of those aged 60 or over expressed interest, compared to 79 per cent of those aged under 60. Interest in research into mental health issues was not significantly higher amongst those aged 18 to 29 than amongst other age groups.

There were few differences in interest in specific areas of health research by highest level of educational qualification:

- Those with no qualifications were less likely to be interested in how genes work and how they affect health and diseases than those with any qualifications (49 per cent and 61 per cent respectively).
- Interest in stem cells fell with educational attainment, from 41 per cent of those with a degree (or equivalent) and above, to 29 per cent of those with no qualifications.

Those who had experienced a mental health issue were more likely to say that they were interested in research into mental health issues than those who had not (83 per cent and 63 per cent respectively), but there were no other differences in levels of interest in specific areas of health research.

Despite the fact that those with a long-standing health condition that affects their day-to-day lives were no more likely than those without to be interested in health research generally, they were more likely to be interested in health research into obesity, ageing, mental health issues, and stem cells (Table 2:1).

Table 2:1 Interest in specific areas of health research, by whether has a long-standing health condition

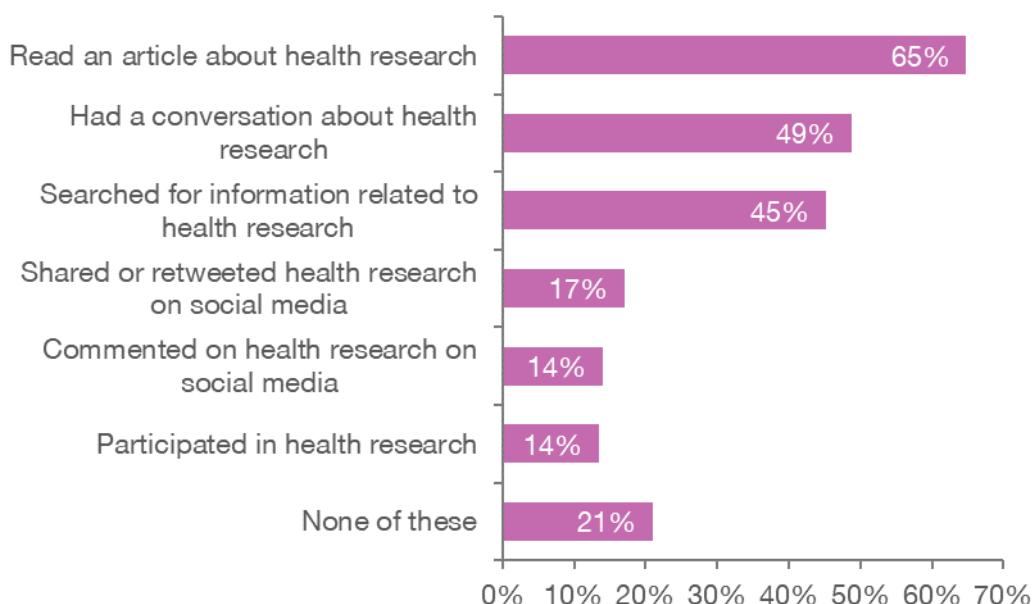
	Long-standing health condition that affects day-to-day life	Long-standing health condition that does not affect day-to-day life	No long-standing health condition
Obesity	53%	43%	43%
How genes work and how they affect health and diseases	58%	58%	60%
Ageing	63%	60%	54%
The health implications of climate change	45%	40%	42%
Mental health issues	83%	75%	73%
Stem cells	45%	36%	37%
Risk of disease	58%	50%	53%
Diseases which affect the developing world	42%	36%	39%
Other	10%	8%	5%
None of these	3%	4%	2%
<i>Unweighted bases</i>	<i>459</i>	<i>534</i>	<i>1713</i>
<i>"Below is a list of specific areas of health research. Which, if any, of these are you interested in?"</i>			
<i>Base: all GB adults 18+</i>			

2.3 Engagement with health research

Respondents were asked whether in the last year they had read an article or had a conversation about health research, searched for information related to health research, shared, retweeted or commented on health research on social media, or participated in health research. Figure 2:6 shows the proportion of people that have engaged with health research in each of these ways over the past year.

Overall, around four in five (79 per cent) reported having done one of the activities related to health research in the past year. The most common activity was reading an article about health research (65 per cent), followed by having a conversation about health research (49 per cent) and searching for information about health research (45 per cent). However, relatively few reported engaging with health research via social media, with 14 per cent commenting on health research, and 17 per cent sharing health research on social media.

Figure 2:6 How people have engaged with health research in the past year



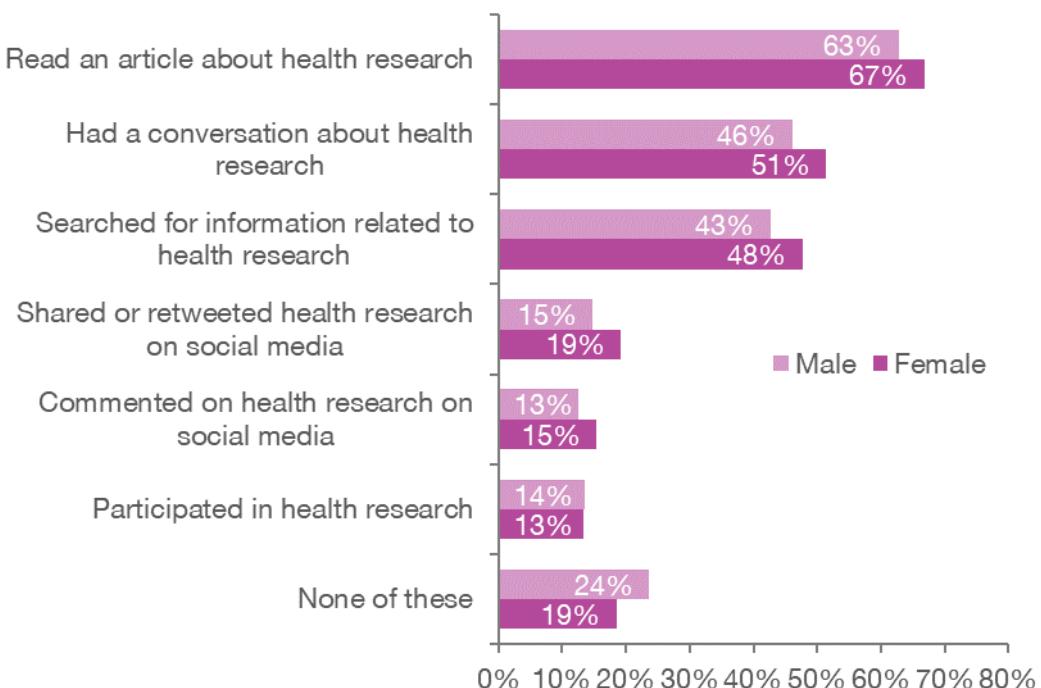
"Below is a list of activities related to health research that some people do. Which of the following activities have you done in the last year?"

Base: all GB adults 18+ (2708)

Figure 2:7 shows the proportion of that had engaged with health research in these ways separately for men and women. Overall, women were more likely to have participated in at least one of these activities than men (81 per cent compared to 76 per cent), which is consistent with the higher overall levels of interest in health research reported by women observed, and the higher levels of interest in both broad and specific areas of health research.

Levels of engagement were higher amongst women than men across all activities, with the exception of participation in health research. However, differences were only statistically significant in relation to having had a conversation about health research and shared or retweeted health research on social media.

Figure 2:7 How people have engaged with health research in the last year, by sex



“Below is a list of activities related to health research that some people do. Which of the following activities have you done in the last year?”

Bases: all GB adults 18+. Men (1145), Women (1563).

Comparing the proportions that had engaged with health research in these ways by age group, Table 2:1 shows that younger groups were in general more engaged with health research, despite the fact that older groups were more interested in health research (Section 2.1). Those aged 18 to 29 were most likely to have engaged in any of these activities in the last year (85 per cent), falling to 74 per cent on those aged 60 to 69, though rising again to 78 per cent of those aged 70 or over. For all activities, those aged 18 to 29 were most likely to have engaged in the last year, with the exception of participating in health research, for which those aged 70 or over were the most likely (17 per cent) and those aged 18 to 29 the least likely (9 per cent), although this relationship is not statistically significant.

Table 2:1 Proportion engaged in activity in the last year, by age

	18-29	30-39	40-49	50-59	60-69	70+
Had a conversation about health research	57%	50%	54%	46%	41%	44%
Commented on health research on social media	19%	14%	15%	16%	7%	12%
Shared or retweeted health research on social media	27%	20%	19%	18%	10%	8%
Searched for information related to health research	52%	46%	46%	45%	44%	39%
Participated in health research	9%	12%	15%	14%	14%	17%
Read an article about health research	73%	68%	59%	64%	63%	64%

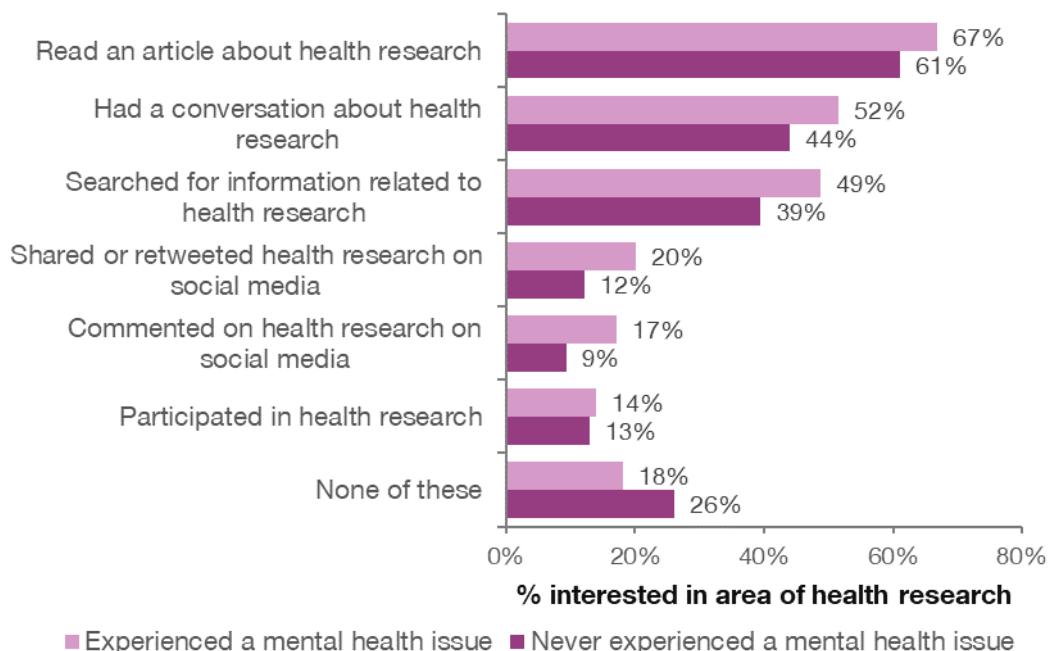
None of these	15%	20%	20%	22%	26%	22%
<i>Base: all GB adults 18+. 18-29 (237), 30-39 (447), 40-49 (459), 50-59 (508), 60-69 (536), 70+ (504).</i>						
<i>"Below is a list of activities related to health research that some people do. Which of the following activities have you done in the last year?"</i>						

In general, people with higher educational qualifications were more likely to have engaged with health research than those with lower qualifications or no qualifications, with the exception of participation in health research. Relatedly, engagement varied by measures of socio-economic status, for example with those with higher incomes more likely to have read an article or had a conversation about health research in the past year. Those with lower incomes were more likely to have engaged with health research on social media, and this was particularly pronounced amongst those who said they were "finding it very difficult" to manage financially, of whom 25 per cent said they had commented on health research on social media compared to 10 per cent of those who were "living comfortably".

There was no statistically significant variation in participation in any of these activities by whether or not a person had a long-standing condition that affects their day-to-day life.

Those who had experienced a mental health issue were more likely to have engaged in any of the activities than those who have not (82 per cent compared to 74 per cent). This is reflected across almost all of activities, with those who had experienced a mental health issue more likely to have participated in all of the activities except participating in health research (Figure 2:8).

Figure 2:8 How people have engaged with health research in the last year, by mental health experiences



"Below is a list of activities related to health research that some people do. Which of the following activities have you done in the last year?"

Bases: all GB adults 18+. Experienced a mental health issue (1666), Never experienced a mental health issue (1017).

3 Sources of health information

This chapter explores how often people try to find health-related information. It examines which forms of media people use as sources of health-related information, and which organisations and individuals they use. The chapter then looks at the degrees of trust that people have in the sources of health-related information that they use. Finally, the chapter examines the extent and manner of people's engagement with health-related information on social media.

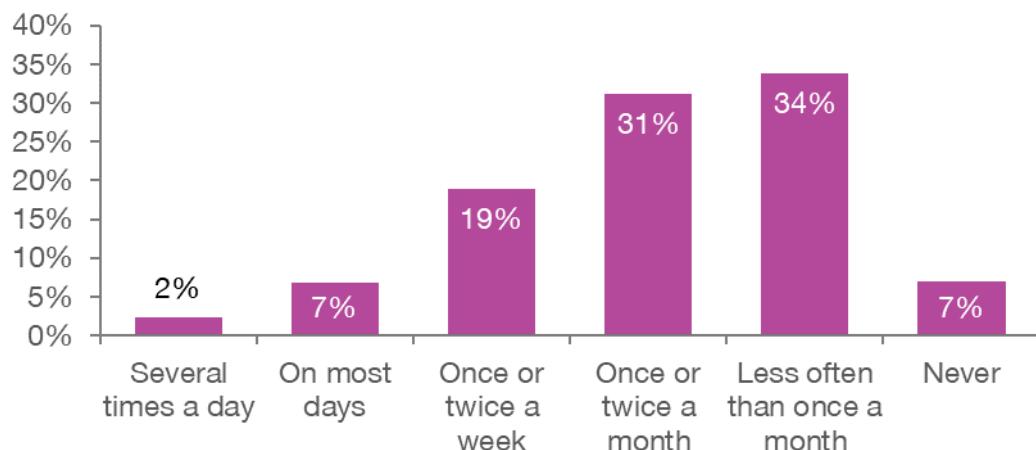
Key findings:

- Younger age-groups try to find health-related information more frequently than older age-groups, with 40 per cent of those aged 18 to 29 doing so once or twice a week or more, falling to 19 per cent of those aged 70 or over.
- More educated people sought out health-related information more often. The proportion that reported trying to find health-related information at least once or twice a week fell from 34 per cent of those with a degree or higher, to 20 per cent of those with no qualifications.
- Those who said that they were “finding it very difficult” to manage financially were significantly more likely (48 per cent) try to find health-related information at least once or twice a week than the rest of the population (27 per cent).
- Websites were the most common form of media that people used as a source of health-related information (77 per cent). Amongst organisations and individuals, the most common sources of information were health professionals (69 per cent) and the news and media (68 per cent).
- Women were more likely to get health-related information from a range of organisations and individuals than men, as were more educated people. Women were more likely than men to get health-related from health professionals, health charities and friends or family.
- Older age-groups are relatively more likely to get health related information from more traditional media sources, such as newspapers, magazines, television and radio, whereas younger age-groups are more likely to get health-related information from newer media sources, such as websites, apps, podcasts, and social media or online forums.
- The most trusted sources of health-related information are health professionals and academics, with 78 per cent and 75 per cent of those who use them expressing complete or a great deal of trust respectively. Sixty-six per cent of people who used health charities as a source of health information expressed complete or a great deal of trust in them. The news and media was the least trusted source, with only 14 per cent of those who use it as a source of health information expressing complete or a great deal of trust.
- People are more likely to engage with health-related research on social media *passively*, rather than *actively*. The majority of those who get health-related information from social media sites or online forums read and follow links to health-related information on social media at least once or twice a month, but only a minority comment, share, or post health-related information at least once or twice a month.

3.1 How often do people try to find health-related information?

Figure 3:1 shows that ninety-three per cent of people tried to find health-related information. Few people reported trying to find health-related information on most days or several times a day (nine per cent), and 19 per cent try to find health-related information once or twice a week. Around a third (31 per cent) try once or twice a month, and around one third try less often than once a month (34 per cent).

Figure 3:1 Frequency of trying to find health-related information



"Approximately how often do you try to find health-related information?"

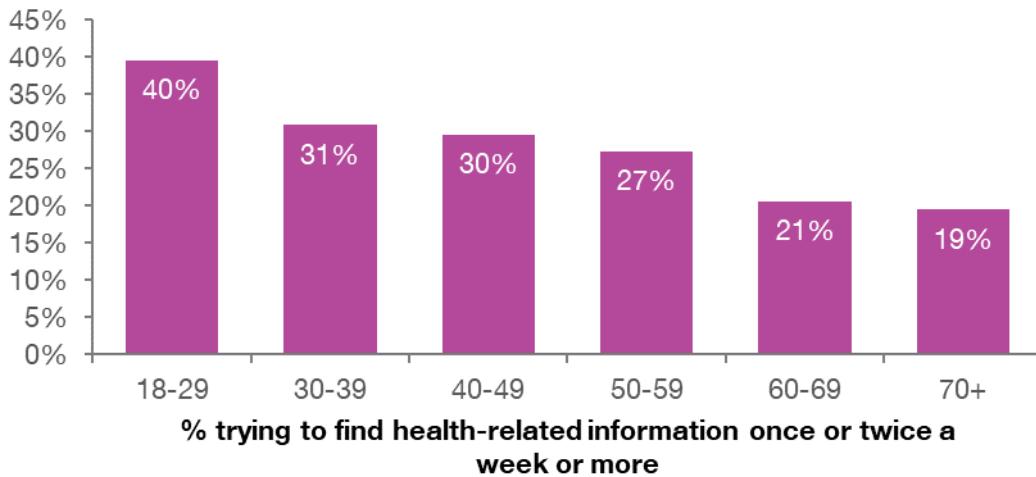
Base: all GB adults 18+ (2704)

Those who reported being more interested in health research reported trying to find health-related information more often. Thirty-two per cent of those who were fairly or very interested in health research reported trying to find health-related information at least once or twice a week, compared to eight per cent of those who were not very, or not at all interested.

There was no statistically significant difference in the frequency of trying to find health-related information between men and women.

The frequency with which people reported trying to find health-related information varied by age group. Figure 3:2 shows how the proportion trying to find health-related information at least once or twice a week decreases with age, from 40 per cent of those aged 18 to 29 to 19 per cent of those aged 70 or over.

Figure 3:2 Frequency of trying to find health-related information, by age group



"Approximately how often do you try to find health-related information?"

Base: all GB adults 18+ (2704). 18-29 (237), 30-39 (447), 40-49 (459), 50-59 (507), 60-69 (534), 70+ (503)

The frequency of accessing health information varied by highest educational qualification obtained. The proportion that reported trying to find health-related information at least once or twice a week fell from 34 per cent of those with a degree or higher, to 20 per cent of those with no qualifications.

There was no statistically significant variation in the frequency with which people reported trying to find health-related information by measures of socio-economic status, including NS-SEC classification, class identity, equivalised income, and area deprivation (IMD), except that those who said that they were "finding it very difficult" to manage financially were significantly more likely (48 per cent) try to find health-related information at least once or twice a week than the rest of the population (27 per cent).

There was no statistically significant variation in the frequency with which people reported trying to find health-related information by whether people had a long-standing condition that affected their day-to-day life. Those who had experienced a mental health issue were more likely (30 per cent) to try to find health-related information at least once or twice a week than those who had not (24 per cent).

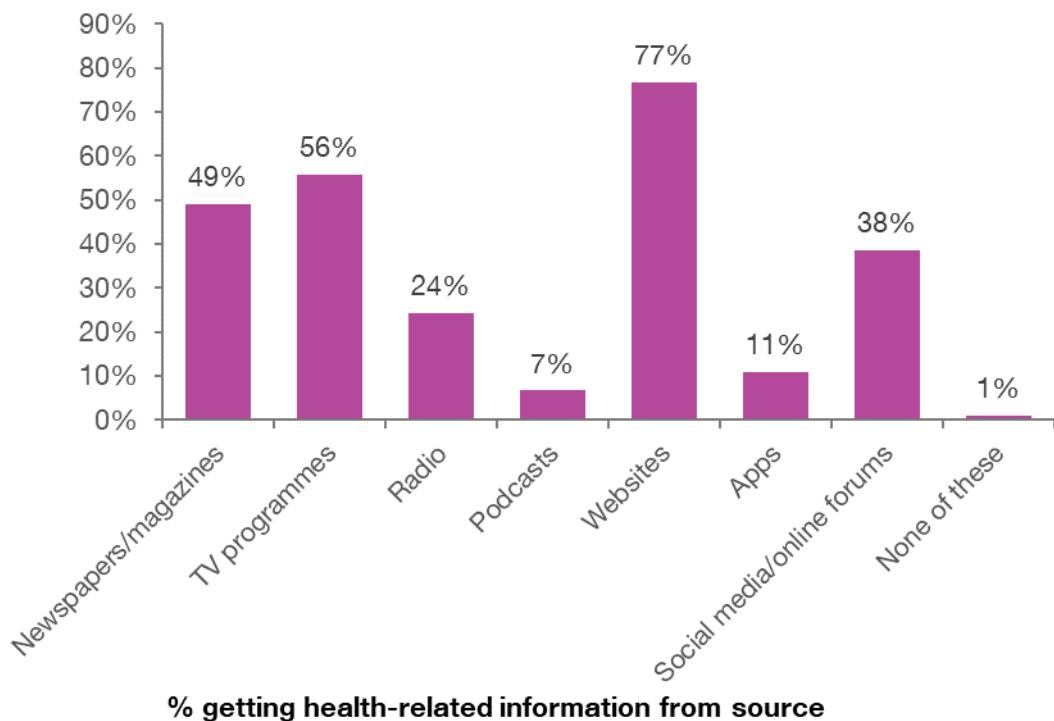
3.2 Where do people get health-related information from?

Figure 3:3 shows the proportion of people using different forms of media as sources of health-related information, and Figure 3:4 shows the proportions using different organisations and individuals. For both questions, respondents could select all sources of information that they used.

Almost everyone (99 per cent) used at least one of the listed forms of media as a source of health-related information. Websites were the most common media source of health-related information (77 per cent), followed by TV programmes and newspapers

and magazines (56 and 49 per cent respectively), social media and online forums (38 per cent), radio (24 per cent), and apps and podcasts (11 and 7 per cent respectively).

Figure 3:3 Sources of health-related information (media)



"From which of the following sources do you get health-related information?"

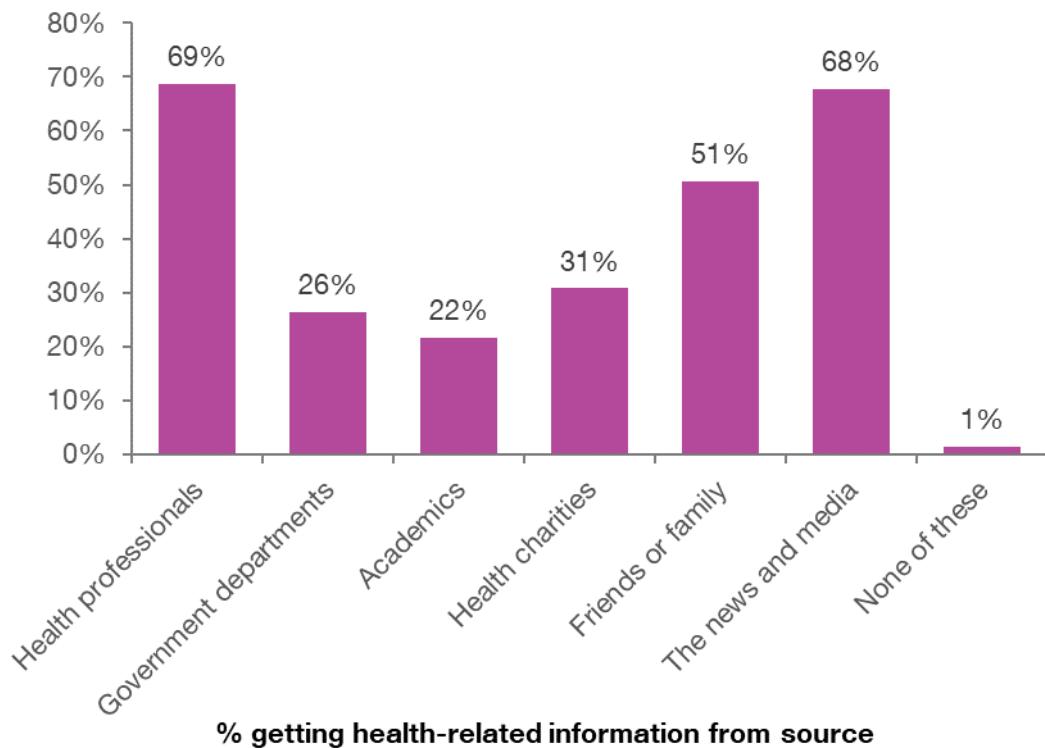
Base: GB adults 18+ who try to find health-related information (2563)

Choices of media sources of health-related information differed between men and women. Women were more likely to get health-related information from TV programmes than men (59 per cent compared to 52 per cent), and from social media sites or online forums (43 per cent compared to 33 per cent). Men were more likely to use the radio as a source of health-related information than were women (27 per cent compared to 22 per cent).

Again, almost all (99 per cent) people used at least one of the organisations and individuals listed as a source of health-related information. Health professionals (69 per cent) and the news and media (68 per cent) were jointly the most used sources of health-related information from the list, followed by friends and family (51 per cent), and then health charities, government departments, and academics (31, 26 and 22 per cent respectively).

There were no associations between the media sources used to access health-related information and the organisations and individuals used.

Figure 3:4 Sources of health information (organisations and individuals)



“From which of the following sources do you get health-related information?”

Base: GB adults 18+ who find health-related information (2563)

Overall, women used a greater variety of sources of health-related information. Women were more likely than men to get health-related information from health professionals (74 per cent of women and 63 per cent of men), health charities (35 per cent of women and 27 per cent of men), and friends or family (54 per cent of women and 47 per cent of men).

Media sources for health-related information differed by age (Table 3:1). The proportion of people using traditional media – newspapers and magazines, TV programmes and radio – tended to increase with age, whereas the proportion using newer forms of media – podcasts, websites and social media or online forums – tended to decrease with age.

Table 3:1 Sources of health-related information, by age

	18-29	30-39	40-49	50-59	60-69	70+
Newspapers/magazines	38%	38%	37%	55%	58%	73%
TV programmes	42%	44%	57%	58%	67%	70%
Radio	13%	13%	27%	26%	33%	37%
Podcasts	14%	8%	6%	5%	4%	3%
Websites	83%	85%	87%	77%	70%	52%
Apps	13%	11%	11%	13%	9%	8%
Social media/online forums	56%	49%	43%	40%	23%	14%
None of these	1%	2%	1%	1%	1%	1%

<i>Bases: GB adults aged 18+ who try to find health-related information</i>	227	432	447	481	507	455
<i>"From which of the following sources do you get health-related information?"</i>						

Turning to use of organisations and individuals as sources of health-related information, there is some variation by age (Table 3:2). Older age groups were more likely to use the news and media as a source of health-related information: the proportion is fairly level at around 62 per cent until age 50, at which point it rises to a high of 80 per cent of those aged 70 or over. The youngest age group was the most likely to use academics as a source of health-related information by a sizeable margin: 40 per cent of those aged 18 to 29, falling relatively steeply to 23 per cent of those aged 30 to 39, and then more gradually to 12 percent of those aged 60 or over. Use of government departments as a source of health information also varied by age: 26 per cent of those aged 18 to 29, rising to 33 per cent of those aged 30 to 39 and then falling steadily to 20 per cent of those aged 60 or over.

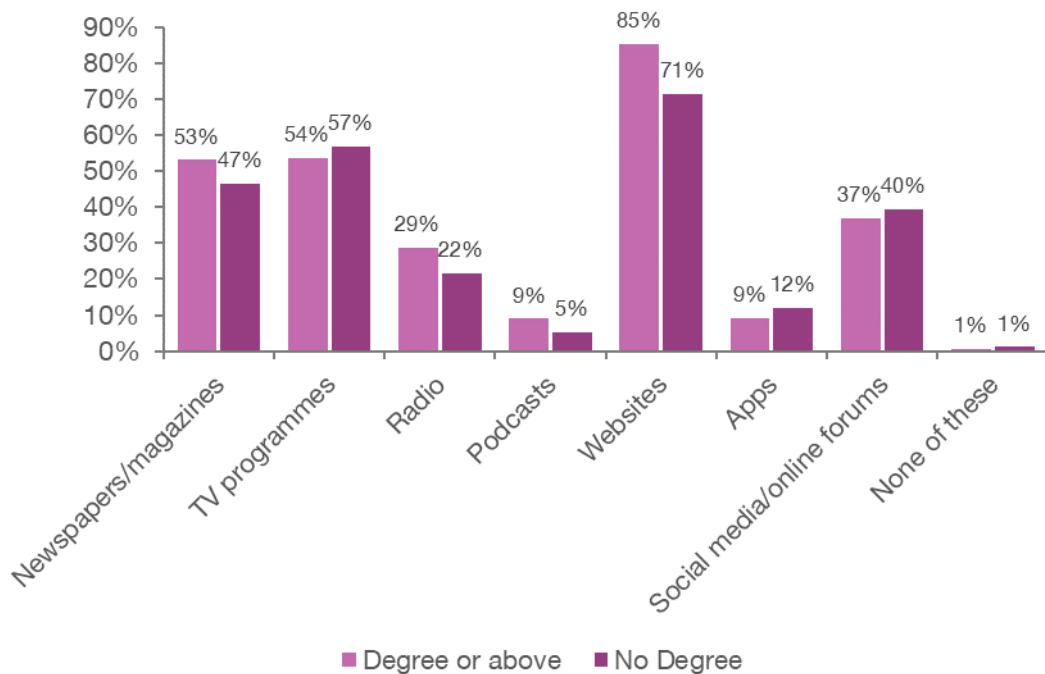
There was no statistically significant variation in the proportions using health professionals, health charities, or friends and family as sources of health-related information by age group.

Table 3:2 Sources of health-related information (organisations and individuals), by age

	18-29	30-39	40-49	50-59	60-69	70+
Health professionals	67%	67%	68%	71%	69%	69%
Government departments	26%	33%	31%	26%	20%	21%
Academics	40%	23%	22%	19%	10%	14%
Health charities	27%	32%	32%	35%	29%	29%
Friends or family	53%	52%	52%	46%	48%	53%
The news and media	62%	65%	61%	69%	73%	80%
None of these	0%	1%	2%	2%	0%	4%
<i>Bases: GB adults aged 18+ who try to find health-related information</i>	227	432	447	481	507	455
<i>"From which of the following sources do you get health-related information?"</i>						

People with higher levels of educational qualification were more likely to get health-related information from some sources. Figure 3:5 shows the proportion of those with a degree or above and of those without a degree who use each form of media, and Figure 3:6 shows the same for organisations and individuals. Those with a degree or above were more likely to get health-related information from newspapers and magazines, radio, podcasts and websites.

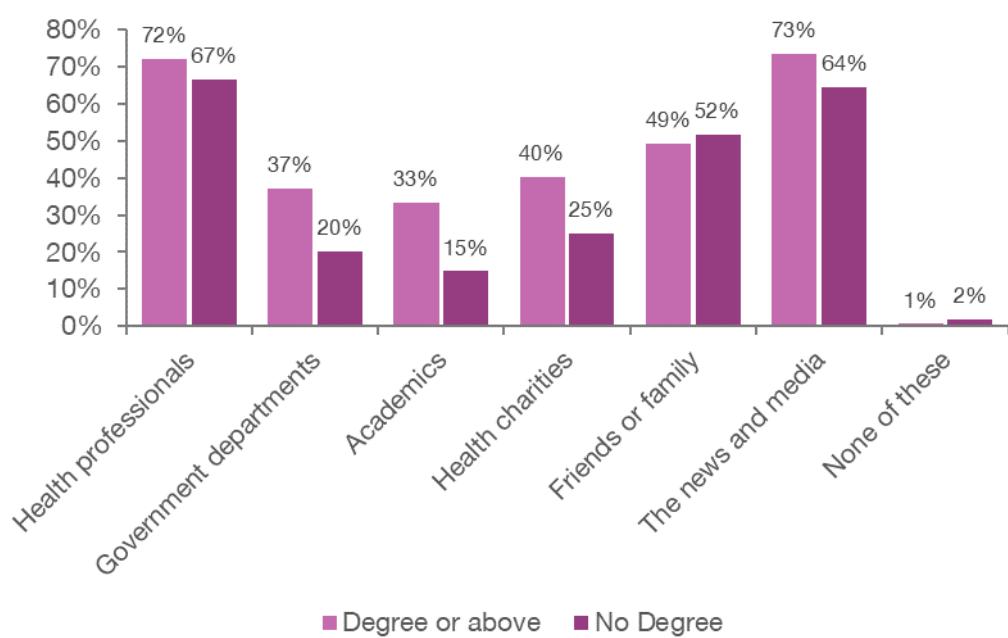
Figure 3:5 Sources of health-related information (media), by education



“From which of the following sources do you get health-related information?”

Base: GB adults 18+ who try to find health-related information. Degree or above (939), no degree (1569).

Figure 3:6 Sources of health-related information (organisations and individuals), by education



“From which of the following sources do you get health-related information?”

Base: GB adults 18+ who try to find health-related information. Degree or above (939), no degree (1569).

Those with a degree were more likely to get health-related information from all sources except friends and family (Figure 3:6).

3.2.1 Trust in sources of health information

Figure 3:5 shows the extent to which people who use different sources of health information trust those sources⁷. The proportion of people expressing complete or a great deal of trust was highest for health professionals (78 per cent) and academics (75 per cent), followed by health charities (66 per cent), government departments (52 per cent), friends and family (41 per cent) and the news and media (14 per cent).

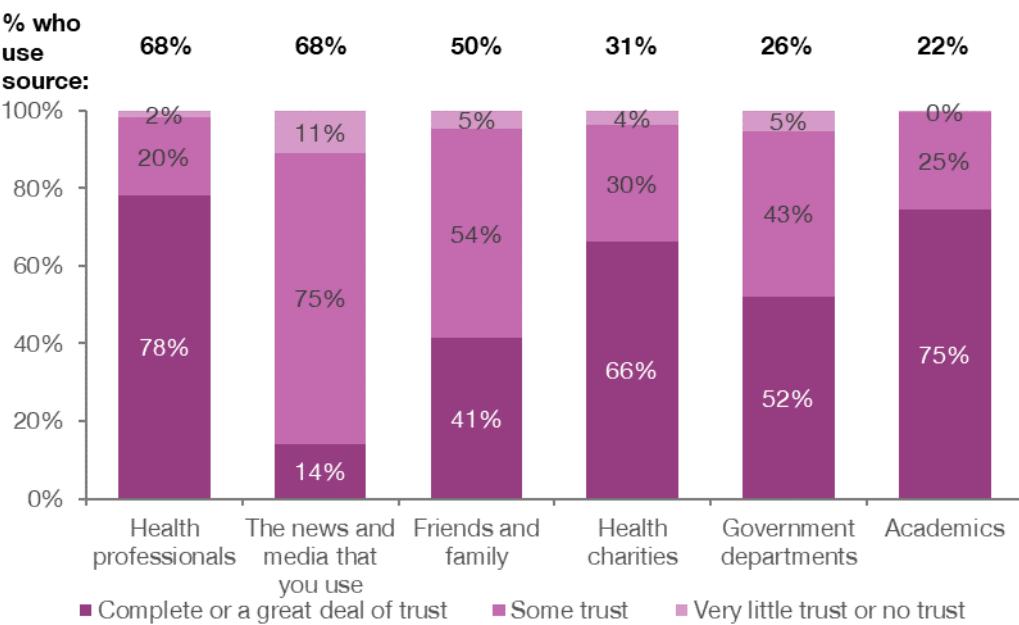
The news and media was the least trusted source of health-related information, even though 68 per cent of people said they use the news and media as a source of health-related information. This reflects the finding from Wave 3 of the Monitor that journalists were the professionals least trusted to provide accurate and reliable information about medical research⁸, at the same time as information about medical research the public encounter being most likely to come from journalistic sources such as news, television and newspapers.

Very low proportions of people expressed very little or no trust in each source of health-related information, most likely reflecting the fact that only respondents who said that they use a given source were asked to give their degree of trust in it.

⁷ Note that this means we do not know the extent to which people who *do not* use these sources do or do not trust them. We cannot say that, for example, that the public trust health charities as a source of health information more than they trust their family and friends.

⁸ Out of: doctors, nurses and other medical practitioners; scientists working in universities; medical research charities; scientists working for pharmaceutical companies; scientists working in private industry; journalists.

Figure 3:5 Trust in sources of health-related information



“How much trust do you have in the health-related information you get from each of these sources?”

Base: GB adults 18+ who get health-related information from: health professionals (1805); academics (544), health charities (879), government departments (708), friends and family (1246), news and media (1817).

Men were more likely to express complete trust or a great deal of trust in health professionals than women (83 per cent and 75 per cent respectively). There were no other differences in the proportions expressing complete trust or a great deal of trust by sex.

There was variation in the degree of trust in several sources by age (Table 3:3). Those aged 70 or over were less likely to express complete or a great deal of trust in academics (41 per cent) than the rest of the population (78 per cent), and less likely to express complete or a great deal of trust in health charities (50 per cent, compared to 69 per cent for the rest of the population). Those aged 18 to 29 were less likely (6 per cent) to express complete or a great deal of trust in news and media than the rest of the population (16 per cent).⁹

Table 3:3 Proportions of people expressing complete or great deal of trust in sources of health-related information, by age

	18-29	30-39	40-49	50-59	60-69	70+
Health professionals	80%	83%	80%	77%	74%	75%
Academics	76%	82%	80%	77%	73%	41%
Health charities	61%	77%	66%	73%	64%	50%
Government departments	65%	57%	58%	37%	51%	39%
Friends and family	45%	47%	44%	38%	38%	36%
The news and media that you use	6%	17%	15%	14%	15%	17%

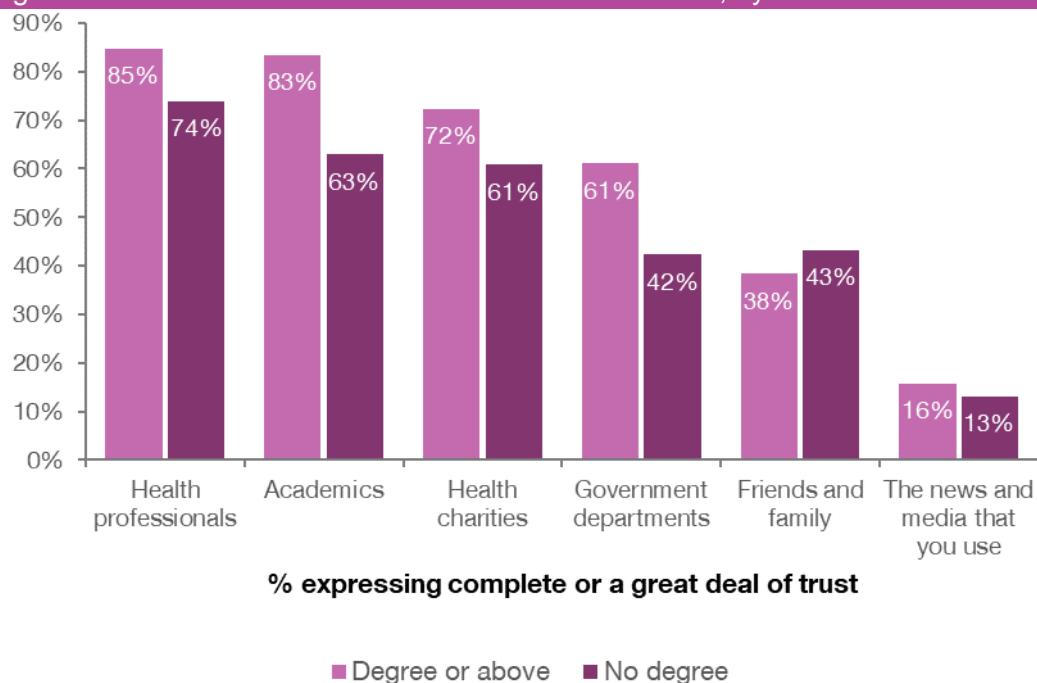
⁹ Whilst all reported differences are statistically significant at the 5 per cent level, some of the base sizes in Table 3:3 are small.

Bases: GB adults aged 18+ who get health related information from: Health professionals: 18-29 (153), 30-39 (308), 40-49 (320), 50-59 (342), 60-69 (354), 70+ (315). Academics: 18-29 (88), 30-39 (112), 40-49 (111), 50-59 (100), 60-69 (70), 70+ (59). Health charities: 18-29 (69), 30-39 (151), 40-49 (178), 50-59 (178), 60-69 (166), 70+ (134). Government departments: 18-29 (66), 30-39 (148), 40-49 (148), 50-59 (138), 60-69 (109), 70+ (95). Friends and family: 18-29 (120), 30-39 (231), 40-49 (217), 50-59 (212), 60-69 (236), 70+ (223). News and media: 18-29 (153), 30-39 (286), 40-49 (270), 50-59 (345), 60-69 (381), 70+ (372).

"How much trust do you have in the health-related information you get from each of these sources?"

Trust in established authorities (health professionals, government departments, academics, and health charities) as sources of health-related information was higher amongst people with higher levels of educational qualifications. Figure 3:6 shows that those people with a degree or above who use health professionals, government departments, academics, or health charities as sources of health-related information had more trust in those sources than people without a degree who use those sources.

Figure 3:6 Trust in sources of health-related information, by education



"How much trust do you have in the health-related information you get from each of these sources?"

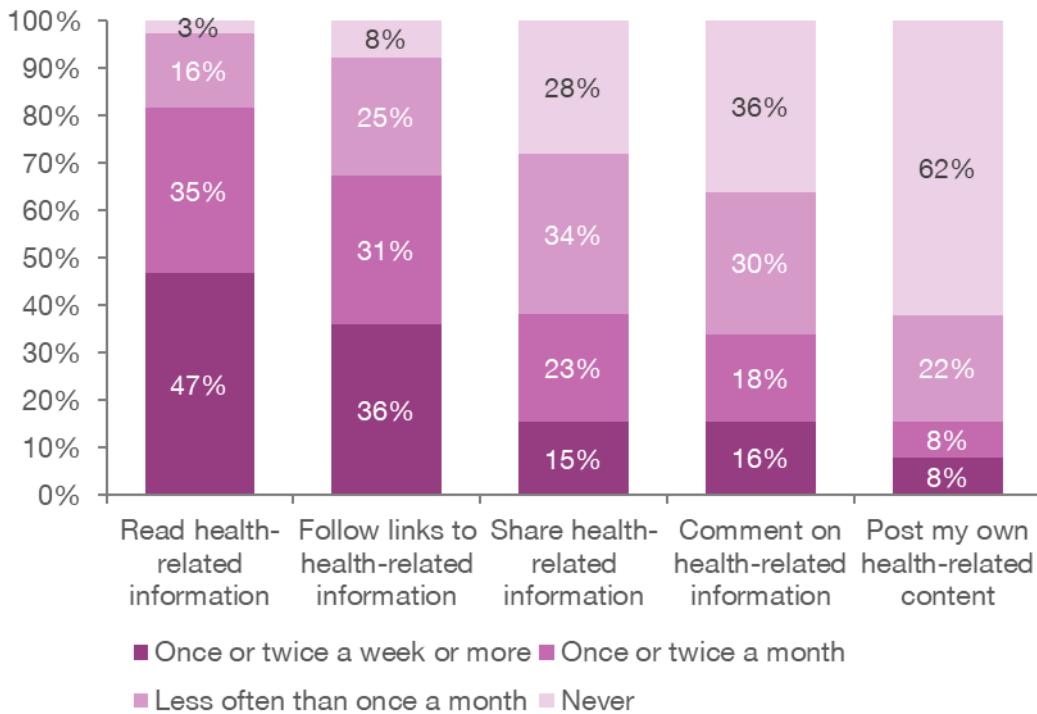
Bases: GB adults 18+ who get health-related information from. Health professionals: degree or above (844), no degree (950). Academics: degree or above (371), no degree (173). Health charities: degree or above (490), no degree (385). Government departments: degree or above (413), no degree (294). Friends and family: degree or above (552), no degree (688). News and media that you use: degree or above (845), no degree (964).

3.3 Social media

Figure 3:7 shows the frequency with which those who get health-related information from social media sites or online forums engage in particular activities on social media. In general, people were more likely to engage in more *passive* activities, and less likely to engage in more *active* ones. Most people who sourced health-related information from social media read it at least once or twice a month (82 per cent) and followed links to it at least once or twice a month (67 per cent). However, a minority commented on

health-related information at least once or twice a month (34 per cent) or share health-related information once or twice a month (38 per cent). More than half of people (62 per cent) said that they never post their own health-related content.

Figure 3:7 Engagement with health information on social media



"Approximately how often do you do each of the following on social media sites or online forums?"

Bases: GB adults aged 18+ who sourced health related information from social media. Read health-related information (969), follows links to health-related information (969), comments on health-related information (966), share health-related information (969), post my own health-related content (965).

There were no statistically significant differences in the proportions performing any of these activities once or twice a week or more between men and women.

While the proportion of those aged 70 or over who get health-related information from social media sites or online forums was much smaller than the proportion of those under 70 who do so, this group of people aged 70 or over were more likely than those in other age groups to engage *actively* with health-related information on social media, by commenting, sharing and posting. For example, 29 per cent of these people aged 70 or over who get health-related information from social media sites or online forums comment on health-related information at least once or twice a week, compared to 15 per cent of those under 70. Overall, however, fewer people aged 70 or over engage actively with health-research on social media: only four per cent of *all* people aged 70 or over comment on health-related information on social media at least once or twice a week, compared to six per cent of those under 70.

People who get health-related information from social media sites or online forums with higher educational qualifications were more likely to read it and to follow links to health-related information on social media regularly than those with lower educational qualifications.

4 Priorities for government research funding

This chapter explores how people think the government should prioritise funding for research between medical research, military/defence research, environmental protection research, research into economic affairs, and research into understanding social issues.

Key findings:

- A majority of people (55 per cent) said that medical research should be the government's top priority for research funding out of medical research, environmental protection research, research into understanding social issues, military and defence research, and research into economic affairs.
- This was true of almost all subgroups. Those with a degree or above were less likely (49 per cent) than the rest of the population (59 per cent) to put medical research as their top priority, as were those with managerial or professional occupations and those who identify as middle class.

4.1 What research do the public think the government should prioritise funding for?

People were asked to rank five areas in which the government funds research in order of priority¹⁰. Table 4:1 shows the mean ranking for each statement, where a ranking of one indicates lowest priority and a ranking of five indicates highest priority, and the proportion selecting each research area as their top priority. Overall, members of the public were most likely to select medical research as the top priority for government research funding, and it received the highest average rank. Environmental protection research had the second highest average ranking, followed by research into understanding social issues. The average rankings for military/defence research and research into economic affairs were the lowest.

Table 4:1: Priorities for government research funding

Research Area	Mean Ranking	Proportion putting as top priority
Medical research	3.1	55%
Environmental protection research	2.3	20%
Research into understanding social issues	1.9	14%
Military/defence research	1.5	10%
Research into economic affairs	1.5	8%

Base: all GB adults 18+ (2673)

¹⁰ This question was the first question of the Wellcome Monitor questionnaire in order to avoid 'priming' effects. Had respondents already been asked a series of questions about medical research this might make them more likely to prioritise medical research funding than they would otherwise have been.

Table 4:1: Priorities for government research funding

"Every year, the government spends money on a number of different things, including research. Below is a list of areas that the government funds research in. In what order do you think the government should prioritise spending on these areas of research at the moment?"

Comparing these results to actual government spending patterns is not straightforward. Medical research received £1.6 billion of funding in 2018-2019, compared to £1.3 billion for defence research and £0.2 billion for environmental protection research. Whilst research into economic affairs was the public's lowest priority on average, it was by far the most well-funded area of research in 2018-2019 (£6.4 billion). However, this likely reflects differences in how the term 'economic affairs' is understood: the government definition includes agriculture, fuel and energy, mining and transport, amongst other categories. "Research into understanding social issues" does not map clearly onto government figures either: if education research is included then research into social issues receives the most funding after research into economic affairs (£2.7 billion), but if education research is excluded then research into social affairs receives the second lowest amount (£0.5 billion).¹¹

Although there were some variations in prioritisation of specific research areas, the overall pattern of medical research being people's highest priority was consistent across sub-groups. The proportion of people selecting medical research as the highest priority for government funding did not vary significantly by sex or age. However, those with a highest qualification of a degree or above were less likely (49 per cent) than those without a degree (59 per cent) to select medical research as their top priority. They were also less likely to put military/defence research as their top priority (7 per cent compared to 11 per cent), and more likely to put environmental research as their top priority (24 per cent compared to 18 percent).

There was also some variation in the proportion of people selecting medical research as the highest priority for government spending on research by measures of socio-economic status. Those in managerial or professional occupations were less likely (51 per cent) than the rest of the population (60 per cent) to put medical research as their highest priority. Those who self-identified as middle class were less likely (50 per cent) than those who self-identified as working class or 'other' (59 per cent) to put medical research as their highest priority. However, there was no variation in the proportion of people selecting medical research as their highest priority by economic measures such as subjective income, equivalised household income, or area deprivation (IMD).

¹¹https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/818399/CCS001_CCS0719570952-001_PESA_ACCESSIBLE.pdf

5 Decisions about one's own health

This chapter explores how people make decisions about their own health. It examines how confident people feel about asking questions of medical professionals, and about challenging or querying their conclusions.

Key findings:

- The most common activity when making decisions about one's own health was following the advice of a medical professional (85 per cent), followed by looking up information and research about the topic (68 per cent), basing a decision on past experience (61 per cent), and following the advice of family and friends (40 per cent).
- Very few follow the advice of the media (8 per cent), consistent with the low levels of trust expressed in the media as a source of health information in Section 3.2.1.
- Women were more likely to follow the advice of a health professional when making decisions about their own health than men.
- Older people were less likely to look up information and research, or to follow the advice of friends and family, and more likely to follow the advice of a health professional.
- More educated people were more likely to make decisions about their own health independently by looking up information and research about the topic or basing their decisions on previous experience.
- Forty-one per cent of people said that a person who feels confident challenging and querying a health professional was 'like me' or 'very much like me'. Confidence in challenging a medical professional did not vary significantly by level of education, or by measures of socio-economic status.
- Older people were more likely to be confident in challenging a health professional, as were those who have a long-standing health condition and those who were more interested and engaged in health research.

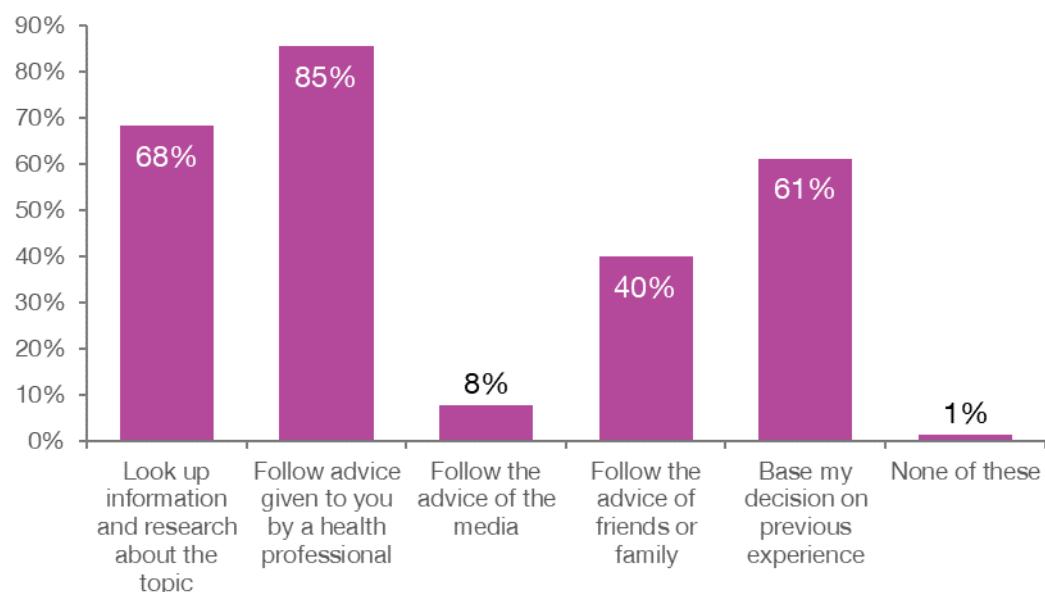
5.1 How do people make decisions about their own health?

Wellcome state they want to ensure that research is providing value to the public and benefiting their health. Understanding how people make decisions about their own health is critical to understanding the pathway by which research may improve people's health, as well as to identifying where public engagement can support this process.

Figure 5:1 shows the proportions of people saying what they do when making decisions about their own health (including when they feel ill, but also related to their mental health and wellbeing). The most common activity was following the advice of a health professional (85 per cent), followed by looking up information and research about the topic (68 per cent), basing a decision on past experience (61 per cent), following the advice of family and friends (40 per cent) and following the advice of the media (eight per cent).

These results reflect the fact that websites and health professionals were the most commonly used sources of health-related information. However, the low proportion who follow the advice of the media when making decisions about their own health (eight per cent) stands in contrast to the 68 per cent of people who use the news and media as a source of health-related information. This likely reflects the low degree of trust in the news and media as a source of health-related information, with only 14 per cent people who use the news and media as a source expressing complete or a great deal of trust in it (Figure 3:5). By contrast, health professionals were both widely used as a source and widely trusted, with 78 per cent of people who use health professionals as a source expressing complete or a great deal of trust.

Figure 5:1 Decisions about one's own health



"When making decisions about your own health, including when you feel ill, but also your mental health and general wellbeing, which of the following do you do?"

Base: GB adults aged 18+ (2708)

When making decisions about their own health, women were more likely to say that they follow advice given to them by a health professional than men (89 per cent of women and 82 per cent of men), reflecting the fact that they were more likely to use health professionals as a source of health-related information generally (74 per cent of women and 63 per cent of men).

The proportion who reported looking up information and research about the topic when making decisions about their own health declined with age, from 78 per cent of those aged 18 to 29 to 52 per cent of those aged 70 or over, as does the proportion who follow the advice of friends and family, which falls from 52 per cent of those aged 18 to 29 to 26 per cent of those aged 60 to 69 (although this rises again to 34 per cent of those aged 70 or over). The proportion who follow advice given to them by a health professional increases with age, from 75 per cent of 18-29-year olds to 92 per cent of those aged 70 or over. There were no other statistically significant differences by age.

There was some variation in how decisions about one's own health were made by education. Respondents with higher educational qualifications were more likely to make decisions about their own health independently by looking up information and research about the topic or basing their decisions on previous experience: 81 per cent of those with a degree said they look up information and research, falling to 42 per cent of those with no qualifications, and 68 per cent of those with a degree said they base decisions on their previous experience, falling to 49 per cent of those with no qualifications.

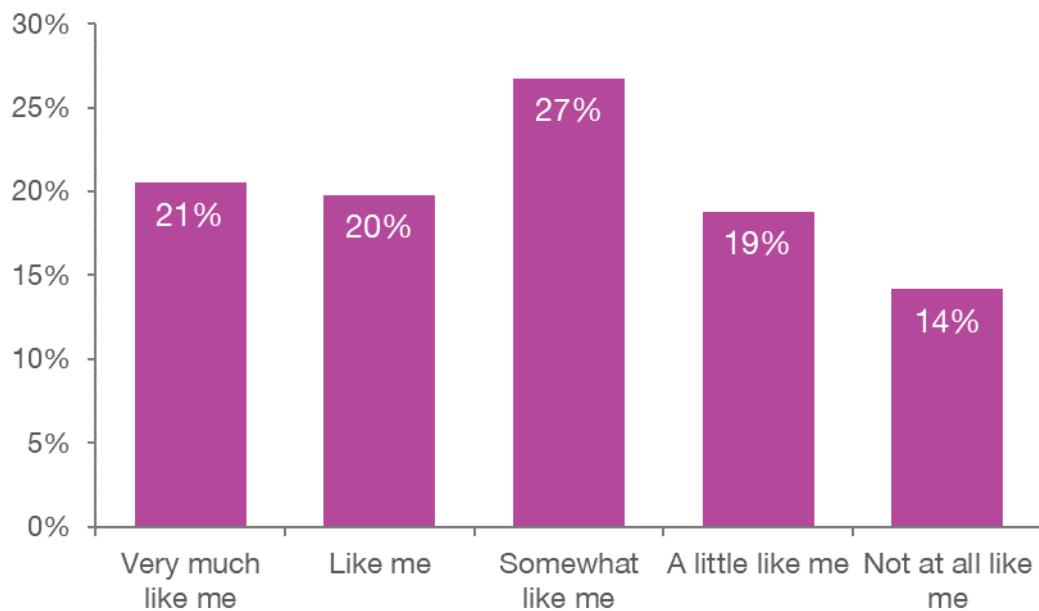
Those with a long-standing condition that affects day-to-day life were more likely follow the advice of a health professional (90 per cent) than those with no long-standing condition (84 per cent), and were less likely to look up information and research about the topic (57 per cent compared to 72 per cent) or to follow the advice of friends or family (34 per cent compared to 43 per cent).

Those who had experienced a mental health issue were more likely to say they look up information and research about the topic when making decisions about their own health than those who had not (72 per cent compared to 63 per cent), and more likely to say they base their decision on previous experience (65 per cent compared to 54 per cent).

5.2 Confidence in challenging medical professionals

Respondents were presented with a description of a person who likes to ask questions of medical professionals to make sure they haven't made a mistake or missed something, and who feels confident querying or challenging a medical professional's conclusions. They were then asked how similar they considered themselves to be to this person. Figure 5:2 shows a fairly even spread of responses across the answer options, with 41 per cent of people saying that such a person was 'like me' or 'very much like me'. A similar pattern was found in Wave 3 of the Monitor in 2015.

Figure 5:2 Extent to which like someone who asks questions, queries and challenges medical professionals



"Below is a brief description of somebody. Please indicate how much this person is, or is not, like you. When he/she sees a medical professional, he/she likes to ask questions to make sure the medical professional hasn't made a mistake or missed something, and feels confident querying or challenging the medical professional's conclusions. How much is this person like you?"

Base: GB adults aged 18+ (2706)

There was no significant difference in the proportions of men and women who said that such a person was 'like me' or 'very much like me'.

Willingness to challenge a medical professional increased with age, with 30 per cent of those aged 18 to 29 saying the above individual was 'like me' or 'very much like me', rising to 48 per cent of those aged 60 or over.

Willingness to challenge a medical professional did not vary significantly by level of education, or by measures of socio-economic status, including NS-SEC, equivalised income, area deprivation (IMD), and class identity, although those who said they were "finding it very difficult" to manage financially were significantly more likely to say that such a person was 'like me' or 'very much like me' than the rest of the population (57 per cent compared to 39 per cent).

Those with a long-standing condition (that affects day-to-day life or does not) were significantly more likely to say that such a person was 'like me' or 'very much like me' than those without a long-standing condition (46 per cent compared to 38 per cent).

Willingness to challenge a medical professional varied significantly by interest in health research. Those who were 'very interested' in health research were most likely to say that such a person was 'like me' or 'very much like me' (56 per cent), falling to 18 per cent of those who were 'not at all interested' in health research. Similarly, those who try to find health-related information more frequently are more willing to challenge a medical professional, with 70 per cent of those who access health-related information

several times day saying that such a person was ‘like me’ or ‘very much like me’, falling to 32 per cent of those who never try to access health-related information.

6 Public involvement in health research

This chapter explores which groups people think should be involved in setting priorities for health research, and whether people think that all types of people in society should be involved in setting these priorities. The chapter then examines the extent to which people think that scientists are interested in the views of the public when they set priorities for health research.

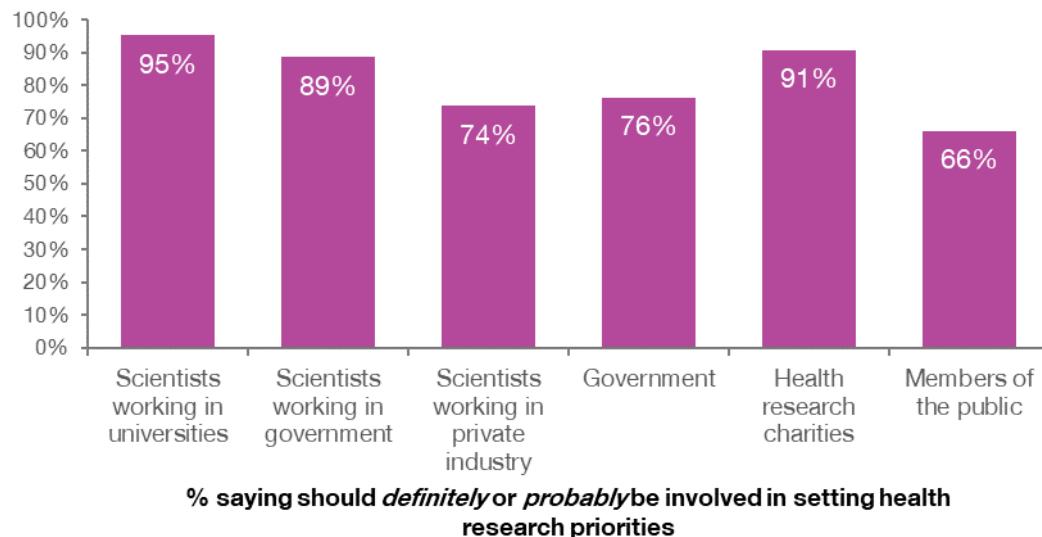
Key findings:

- People were asked whether government, health research charities, members of the public, or scientists working in universities, government, or private industry should be involved in setting health research priorities. A majority of people felt that each of these groups should definitely or probably be involved in setting priorities for health research.
- This is consistent with the fact that a majority (57 per cent) agreed or strongly agreed that all types of people in society should be involved in setting health research priorities. This proportion did not vary across demographic or socio-economic groups.
- A very high proportion of people (91 per cent) said that health research charities should definitely or probably be involved in setting priorities for health research.
- Thirty-five per cent of people agreed or strongly agreed that scientists are interested in the views of the public when setting health-research priorities, and 22 per cent disagreed or strongly disagreed. However, 43 per cent did not feel strongly either way or did not feel sufficiently informed to express opinion, saying that they neither agreed nor disagreed.

6.1 Who should be involved in setting priorities for health research?

Figure 6:1 shows the proportion saying that government, health research charities, members of the public, and scientists working in universities, government, or private industry should definitely or probably be involved in setting priorities for health research. A majority of people felt that each of these groups should be involved in setting priorities for health research, but levels of support varied by group. Scientists working in universities had the highest proportion of people saying they should definitely or probably be involved (95 per cent), followed by health research charities and scientists working in government (91 per cent and 89 per cent respectively), government and scientists working private industry (76 per cent and 74 per cent respectively), and lastly members of the public (66 per cent). High proportions of people felt that scientists in general should probably or definitely be involved, but this proportion was lower for scientists in private industry than scientists working in universities or government.

Figure 6:1 Who should be involved in setting priorities for health research



*"To what extent do you think each of the following groups should, or should not, be involved in **setting priorities** for health research?"*

Base: GB adults aged 18+: government (2683), scientists working in universities (2686), scientists working in government (2693), scientists working private industry (2677), health research charities (2681), members of the public (2686).

There were few significant differences in the proportions of men and women saying that groups should definitely or probably be involved, with 91 per cent of men saying that scientists in government should definitely or probably be involved compared to 87 per cent of women, and 69 per cent of women saying that members of the public should definitely or probably be involved compared to 63 per cent of men.

There was significant variation in opinion between age groups on the involvement in setting priorities for health research of all groups except scientists work in universities, for whom a very large majority of all ages groups were in favour of involvement (Table 6:1).

Table 6:1 Which groups should definitely or probably be involved in setting health research priorities, by age

	18-29	30-39	40-49	50-59	60-69	70+
Scientists working in universities	95%	97%	96%	95%	94%	94%
Scientists working in government	86%	88%	92%	94%	88%	83%
Scientists working in private industry	74%	79%	76%	77%	69%	66%
Government	74%	78%	81%	77%	78%	69%
Health research charities	91%	93%	91%	94%	91%	84%
Members of the public	61%	72%	72%	67%	69%	54%

Bases: all GB adults 18+. Scientists working in universities: 18-29 (237), 30-39 (446), 40-49 (456), 50-59 (505), 60-69 (533), 70+ (492). Scientists working government: (237), 30-39 (446), 40-49 (456), 50-59 (504), 60-69 (536), 70+ (497). Scientists working in private industry: 18-29 (237), 30-39 (445), 40-49 (454), 50-59 (500) 60-69 (531) 70+ (493). Government: 18-29 (236), 30-39 (445), 40-49 (457), 50-59 (504), 60-69 (529), 70+ (495). Health research charities: 18-29 (237), 30-39 (445), 40-49 (458), 50-59 (504), 60-69 (533), 70+ (497). Members of the public: 18-29 (236), 30-39 (446), 40-49 (456), 50-59 (503), 60-69 (534), 70+ (494).

*"To what extent do you think each of the following groups should, or should not, be involved in **setting priorities** for health research?"*

People with higher educational qualifications were more likely to say that government and scientists in government should definitely or probably be involved in setting priorities for health research. Eighty-one per cent of those with a degree or equivalent and above said that government should definitely or probably be involved, falling to 70 per cent of those with no qualifications, and 92 per cent of those with a degree or equivalent and above said that scientists in government should definitely or probably be involved, falling to 85 per cent of those with no qualifications.

Measures of socio-economic status show a similar pattern. Looking at equivalised income, those in higher income groups were more likely to say that government and scientists in government should definitely or probably be involved in setting priorities for health research. Looking at subjective income, those who were 'finding it very difficult' were most likely (76 per cent) to say that members of the public should definitely or probably be involved, falling to 62 per cent of those who were 'living comfortably'.

People who had a long-standing health condition that affects their day-to-day life were less likely (69 per cent) to say that government should definitely or probably be involved in setting health research priorities than those without (78 per cent). There were no differences in views on who should be involved in setting research priorities by experiences of mental health issues.

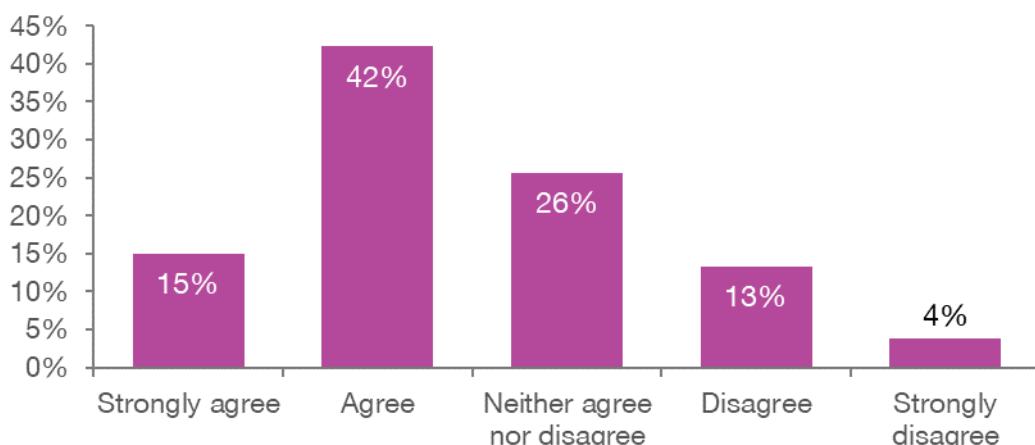
Respondents were asked whether they agreed that scientists are interested in the views of the public when considering priorities for health research (Section 6.3). For scientists working in universities, the proportion of people who said they should probably or definitely be involved in setting priorities falls from 96 per cent of those who strongly agreed with the statement to 87 per cent of those who strongly disagreed. There was a similar pattern for scientists in government¹², and for scientists in private industry. However, what is striking is the high proportions of people saying that scientists should be involved in setting priorities *despite* disagreeing that scientists are interested in the views of the public, which suggests a high degree of trust in scientists to independently make decisions about research priorities.

6.2 Should all types of people in society be involved in setting priorities in health research?

Respondents were additionally asked the extent to which they agree that all types of people in society should be involved in setting priorities for health research (Figure 6:2). Overall, a majority (57 per cent) agreed or strongly agreed.

¹² Significant at 10% level.

Figure 6:2 All types of people in society should be involved in setting priorities in health research



*"To what extent do you agree with the following statement? All types of people in society should be involved in **setting priorities** for health research."*

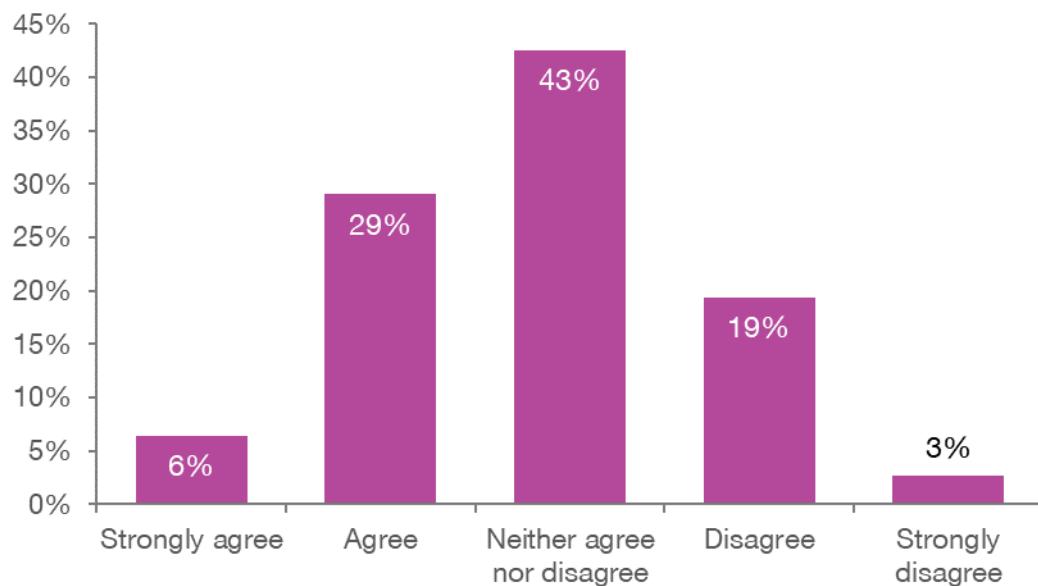
Base: GB adults aged 18+ (2700)

There was no statistically significant variation in the proportion of people agreeing or strongly agreeing that all types of people should be involved in setting priorities for health research by sex, age, education, or measures of socio-economic status, including equivalised income, subjective income and NS-SEC.

6.3 Are scientists interested in the views of the public?

Figure 6:3 shows the extent of agreement with the statement "Scientists are interested in the views of the public when considering the priorities for research and how it is produced". Overall, more people agreed or strongly agreed with the statement (35 per cent) than disagreed or strongly disagreed (22 per cent). However, a large proportion did not feel strongly either way, or did not feel sufficiently informed to provide an opinion, with 43 per cent of people saying they neither agree nor disagree. High rates of 'neither/nor' responding is often a sign that people do not have well-formed views on an issue.

Figure 6:3 Scientists are interested in the views of the public when considering the priorities for research and how it is produced



"To what extent do you agree with the following statement? Scientists are interested in the views of the public when considering the priorities for research and how it is produced."

Base: GB adults aged 18+ (2696)

Those with no educational qualifications were significantly more likely to strongly agree or agree that scientists are interested in the views of the public when setting research priorities than those with any qualifications (46 per cent and 33 per cent respectively). There were no other significant demographic differences.

7 Willingness to share health information

This chapter explores how willing people are to share information about their health for the purposes of health research, including their medical records, information about their genes and information about their mental health. It examines the most prevalent concerns regarding the sharing of this information.

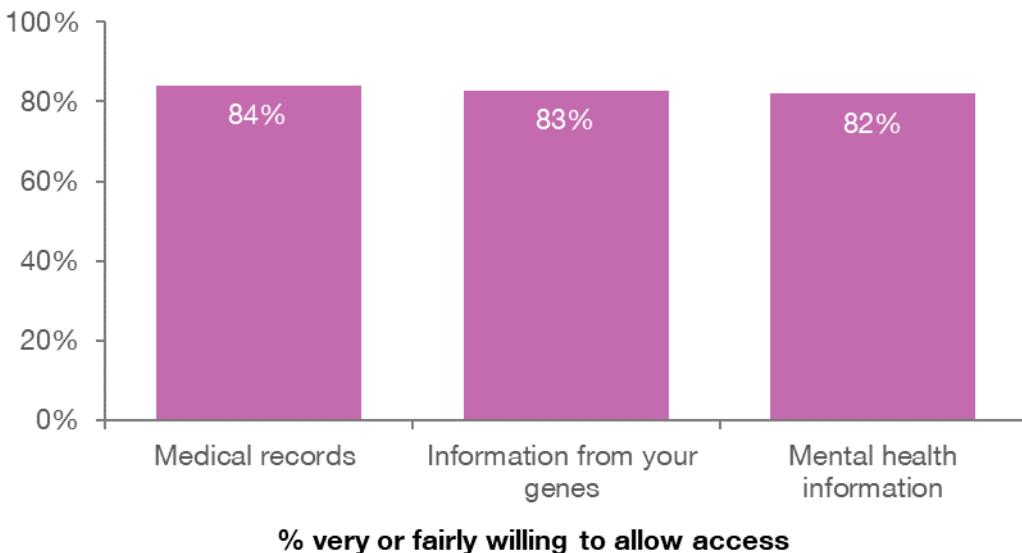
Key findings:

- Willingness to share medical records, information about genes, and mental health information for medical research purposes was high: over 80 per cent of people were either fairly or very willing to share each.
- This willingness was high across all demographic groups, with no variation by sex or age.
- More educated people are more willing to share health information.
- Concerns regarding privacy was amongst the common concerns for those who were unwilling to share their information, for all three kinds of information.

7.1 Are people willing to share their health information with researchers?

People were asked their willingness to allow their medical records, information about their genes, and their mental health information to be used in a medical research study. They were told that the information given to researchers would not include their name, date of birth, address or any contact details. As seen in previous waves of the Monitor, rates of willingness were high and similar for all three kinds of information. The proportion of people who said they would be very or fairly willing to allow their information to be used was 84 per cent for medical records, 83 per cent for information about your genes, and 82 per cent for mental health information (Figure 7:1).

Figure 7:1 Willingness to share health information



*"How willing or willing would you be to allow your **medical records/information from your genes/mental health information** to be used in medical research?"*

Base: GB adults aged 18+: medical records (2704), genetic information (2701), mental health information (2701).

Men were slightly more likely to say they would be very or fairly willing to allow access to their medical records than women (86 per cent and 82 per cent respectively), but differences by sex were not statistically significant for information about genes and mental health.

There were no statistically significant differences in the proportion very or fairly willing to allow access to any kind of information by age.

Those with no educational qualifications were roughly 10 percentage points less likely to be very or fairly willing to allow access to each type of information than those with any qualifications (84 - 86 per cent compared to 71 - 75 per cent).

There was no statistically significant variation in the proportion of people who were very or fairly willing to share each type of health information by degree of interest in health research.

Those who had experienced any kind of mental health issue were more likely to be very or fairly willing to allow access to their mental health information for health research than those who have never experienced a mental health issue (84 per cent and 78 per cent).

There was some variation in willingness by measures of socio-economic status, including equivalised income, subjective income, subjective class identity and NS-SEC, with a general trend of those with higher socio-economic status being more willing to share information. Looking at equivalised income, 77 per cent of those in the lowest category (less than £800 per month) were fairly or very willing to share their medical records, rising to 89 per cent of those in the highest category (more than £2000 per month). Similarly, 77 per cent of those in the lowest category were fairly or very willing

to share information about their mental health, rising to 85 per cent of the highest category.

7.2 What concerns did people have about sharing their health information?

Those respondents that were either fairly or very unwilling to share their health information were asked what concerns they would have about their information being used in this way. The results are shown in Table 7:1. For all three types of information, concerns regarding privacy were amongst the most common.

Table 7:1 Concerns about sharing health information

	Medical records	Information from your genes	Mental health information
Concerns regarding privacy	79%	69%	75%
Concerns about how the data will be used or who will use it	72%	71%	64%
Data security	72%	60%	60%
Who/which organisation is conducting the research	64%	58%	56%
Concerns about the purpose of the research	53%	62%	56%
Don't know enough about it	44%	50%	50%
Other	2%	4%	2%
I would have no concerns	6%	7%	8%
Don't know	0%	0%	0%
<i>Bases: all GB adults 18+</i>	349	384	426
<i>"What concerns, if any, would you have about your medical records/information from your genes/ your mental health information being used in this way?"</i>			

8 Understanding of mental health research

Mental health is a strategic priority area for Wellcome. It aims to find the best ways to treat people effectively and transform outcomes that can be achieved by drawing on cutting edge science.

This chapter explores how people understand the term ‘mental health problem’, what they think mental health research aims to achieve and what they think mental health researchers do in order to understand mental health problems.

Key findings:

- When people were asked to explain in their own words what they understood by the term ‘mental health problem’, 38 per cent of people described mental health problems generally as an illness or condition related to the mind or brain, while with 35 per cent of people named a specific condition. Of all specific conditions, depression was the most commonly mentioned (25 per cent of all responses), followed by anxiety disorders (15 per cent) with other options less common.
- When people were asked to explain in their own words what they thought mental health research aims to achieve, the most common responses were understanding how mental health conditions or the brain works (32 per cent), developing ways to cure or treat mental health conditions (28 per cent), and developing ways to help people manage mental health conditions (27 per cent).
- When people were asked to explain in their own words what they thought mental health researchers do, 17 per cent of responses were coded as describing lab-based methods, 28 per cent as describing social research methods and seven per cent as giving another relevant answer that was not in the code frame. Fifteen per cent of responses were coded as “don’t know”, and a very high proportion of responses (42 per cent) were coded as vague or irrelevant. Younger people were more able to articulate a clear view on what mental health researchers do.

8.1 How to do people understand the term ‘mental health problem’?

Respondents were asked to describe in their own words what they understand by the term ‘mental health problem’, with answers coded by a team of coders¹³.

Thirty-eight per cent of people described mental health problems generally as an illness or condition related to the mind or brain, while 35 per cent of people named a specific condition (Table 8:1). Of the specific conditions, depression was the most commonly mentioned (25 per cent), followed by anxiety disorders (15 per cent).

¹³ Full details on the coding process is provided in the methodology Appendix. Since answers could be coded into multiple categories, percentages will not total to 100 per cent.

Fifteen per cent of people mentioned an ‘other mental, emotional or neurological condition’. A common response was high levels of stress, with other responses in this category including suicidal thoughts or tendencies, self-harm, learning difficulties or special needs, lack of sleep or insomnia, and fear.

Table 8:1 Understanding of the term ‘mental health problem’

Answer code	Proportion mentioning
<i>Understanding of the term ‘mental health condition’ – Specific condition named</i>	
Depression	25%
Any other anxiety disorder	15%
Any other mental, emotional or neurological problem or condition	15%
Psychosis or schizophrenia	6%
Other specific condition mentioned by less than 5 per cent of the population ¹⁴	13%
<i>Understanding of the term ‘mental health condition’ – Specific condition not named</i>	
Generally described as an illness or a condition related to the mind or brain	38%
<i>Understanding of the term ‘mental health condition’ – Other answers</i>	
Other relevant answer not in code-frame	36%
Vague or irrelevant answer	4%
Don’t Know	2%
Base: all UK adults 18+	2583
“Mental health problems can be thought about in many different ways. We are interested in finding out what you understand by the term ‘mental health problems’. In your own words, what do you understand by the term ‘mental health problem’?”	

How else do people understand the term ‘mental health problem’?

A large proportion of answers (36 per cent) were identified as relevant but not fitting into any of the codes in the code frame. Four of the most common types of answer that were coded in this way are described in Table 8:2.

Table 8:2 Other ways of understanding the term ‘mental health problem’

Something that negatively impacts on a person’s day-to-day functioning or limits their ability to lead a ‘normal’ life.

	<i>Examples:</i>
	<p>“Mental health problems can stem from or be exasperated by many things but that make it difficult to lead a normal life or perhaps a happy life”</p> <p>“A problem involving negative feelings about oneself serious enough to affect wellbeing, relationships with others and/or ability to work etc.”</p> <p>“Where mental health impacts your ability to approach day to day activities”</p> <p>“a person who is unable to participate fully in everyday life, has difficulty interacting with others around them. Sometimes has feelings of despair and can see no way forward.”</p>

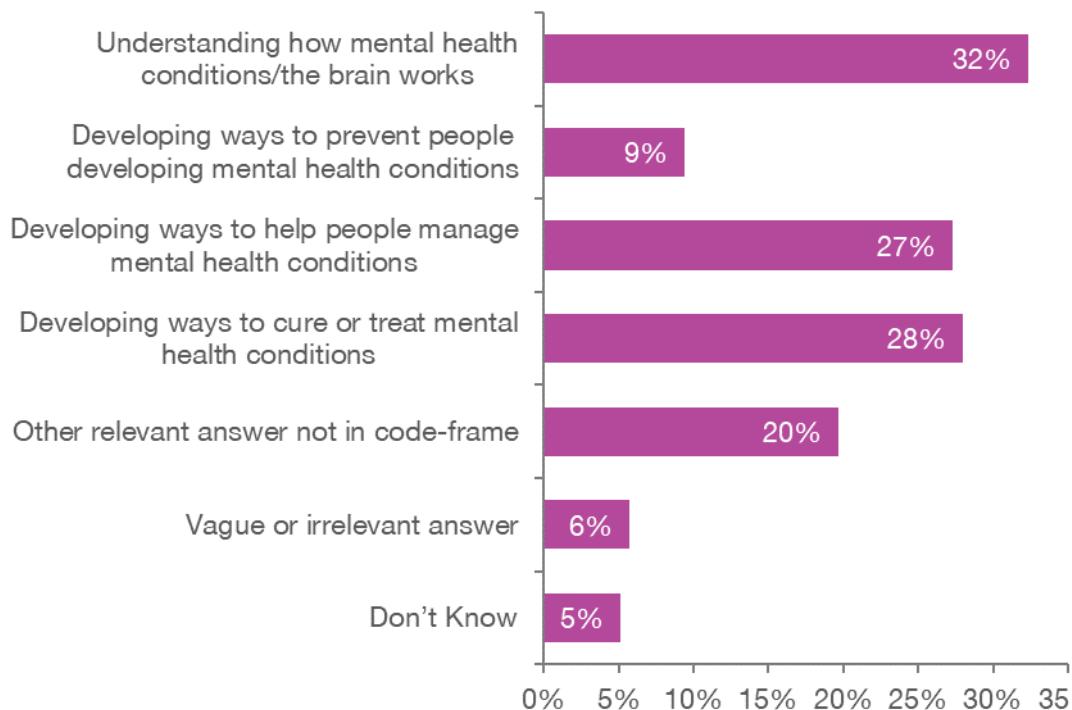
¹⁴ Includes: bipolar disorder (3 per cent), dementia including Alzheimer’s (3 per cent), personality disorders (2 per cent), PTSD (2 per cent), alcohol or drug dependence (2 per cent), OCD (2 per cent), eating disorders (1 per cent), panic attacks (1 per cent), ADHD or ADD (1 per cent), nervous breakdown (1 per cent), phobias (1 per cent) and post-natal depression (less than 1 per cent).

	"Any issue which appears to impact on a person's ability to focus on the routine activities they require to deal with or be involved in daily while getting on with all aspects of their life."
Something that negatively impacts a person's wellbeing	
	<i>Examples:</i>
"Anything affecting your overall well being and causes worry." "Any problem or perceived problem that affects your health or wellbeing." "a illness which affects wellbeing"	
Being unable to cope with life or circumstances or events	
	<i>Examples:</i>
"Inability to cope" "An inability to cope with you individual circumstances or situation." "Inability to cope with the current realities of your society." "Someone not able to cope with life." "Not necessarily just the obvious things from birth defects but when life itself has become too much for a person to bare caused by stress or the events of their life."	
An illness that does not have physical symptoms	
	<i>Examples:</i>
"When a person is unwell but does not exhibit any physical symptoms." "I see mental health problems the same as if you had any kind of illness. Only difference being that its not outwardly visible" "Issues which are not physical but can affect every day function" "Someone whose health is affected not in a physical way" "People who have issues dealing with everyday activities yet show no physical signs of injury/illness."	

8.2 What does mental health research aim to achieve?

Respondents were asked to describe in their own words what mental health research aims to achieve. Responses were coded into four substantive categories, with the results shown in Figure 8:1. The most common responses were understanding how mental health conditions or the brain works (32 per cent), developing ways to cure or treat mental health conditions (28 per cent), and developing ways to help people manage mental health conditions (27 per cent). The least common of the substantive answers was developing ways to prevent people developing mental health conditions (9 per cent), and a sizeable minority of people (5 per cent) said that they don't know what the aims of mental health research are.

Figure 8:1 What does mental health research aim to achieve?



*"Now thinking about **research into mental health**. What do you think mental health research aims to achieve?"*

Base: GB adults aged 18+: 2601

What else do people think mental health research aims to achieve?

Twenty per cent of responses were coded as relevant but not codable into one of the codes in the code frame. Table 8:3 gives an overview of three common types of answer that were coded into this category.

Table 8:3 Other aims of mental health research

To achieve greater wellbeing or happiness, to improve quality of life or make life easier, either in individuals or amongst the population more broadly	
<i>Examples:</i>	
	<ul style="list-style-type: none"> “greater well being” “A better and safer society” “To try to control it to make life easier” “Discover ways to improve the lives of all humanity.” “To improve the wellbeing of the population”
To improve attitudes to or understanding and awareness of mental health problems	
<i>Examples:</i>	
	<ul style="list-style-type: none"> “More understanding and awareness of people who have mental problems but don’t realise they have got them.....” “To normalise peoples reaction to someone with a mental health problem. To get people talking about mental health problems and accessing help.”

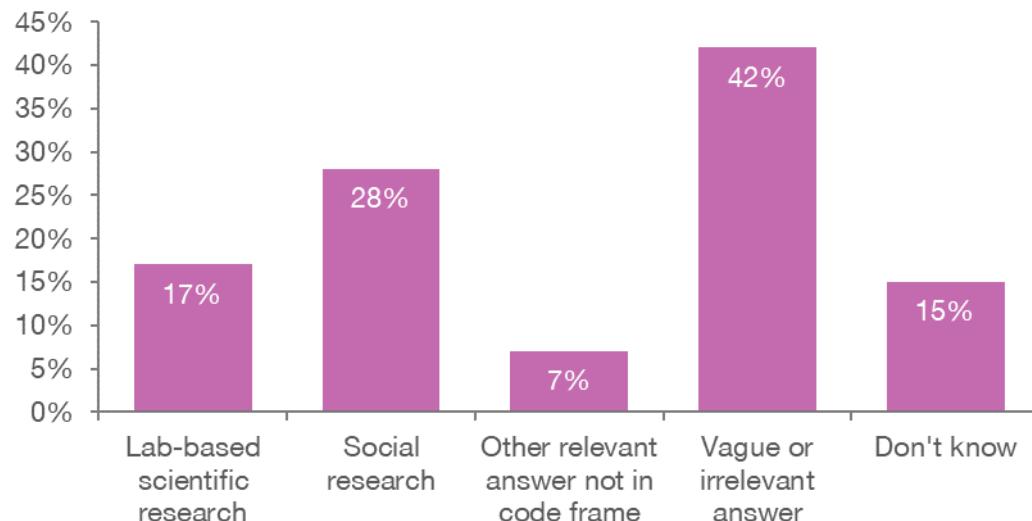
	<p>"To make it more acceptable to discuss and improve peoples chances of managing and curing"</p> <p>"To make a person feel relaxed about who they are and be strong enough to live with others."</p>
Answers that do not distinguish between managing and curing	
	<p><i>Examples:</i></p> <p>"The best way of tackling individual mental health problems considering medication or therapy or supported activities"</p> <p>"closure on mental heath problems"</p> <p>"More ways to help someone"</p> <p>"People getting help with there health issues."</p> <p>"Reduce mental health issues"</p> <p>"I hope it aims to help people"</p>

8.3 What do mental health researchers do?

Respondents were asked to describe in their own words what they thought mental health researchers do to try to understand mental health conditions. Answers were then coded into a code frame that focussed on whether responses mentioned research methods that are 'lab-based' (e.g. drug development or brain scans), or mentioned 'social research' methods (e.g. surveys, interviews or ethnographies).

Overall, 17 per cent of responses were coded as describing lab-based methods, 28 per cent as describing social research methods and seven per cent as giving another relevant answer that was not in the code frame (Figure 8:2). Fifteen per cent of responses were coded as "don't know", and a very high proportion of responses (42 per cent) were coded as vague or irrelevant, suggesting low levels of knowledge in the general public of what mental health researchers do.

Figure 8:2 What do mental health researchers do?



"What sort of things do you think researchers do to understand mental health problems?"
Base: GB adults aged 18+:

Vague or irrelevant answers

Answers coded as vague or irrelevant were mostly answers that were not sufficiently specific to be described as either lab-based or social research. Responses that simply mentioned “assessing patients” do not distinguish between assessment using medical, lab-based methods or assessment using qualitative interviewing or observation, while “case studies” does not distinguish between case studies as a distinct social research methodology and medical case studies. Some examples of responses that were coded as vague are as follows:

- “just examine patients and try to discover what is wrong with them”
- “Look at cases of people with mental health problems”
- “Look at people and their issues, health and general well being”
- “They have met with individuals with the problem”
- “They probably study the behaviour of people with mental health problems.”
- “Research”
- “Assess patients”
- “Research people affected and professionals in the industry”
- “isolate problems, find causes and find cures or aid a more complete functioning”
- “Study data.”
- “Observations of people once the problem manifests itself.”

There were no statistically significant differences in answers by sex.

Responses did vary significantly by age. Younger people were more likely to mention lab-based methods than older people (23 per cent of 18 to 29 year olds, falling to nine per cent of those aged 70 or over), and more likely to mention social research methods than older people (34 per cent of 18 to 29 year olds, falling to 21 per cent of those aged 70 or over). Older people were more likely to say that they don’t know what mental health researchers do (23 per cent of those aged 70 or over, falling to 12 per cent of those aged 18 to 29).

9 Health threats

This chapter explores what people consider to be the most serious risks to public health.

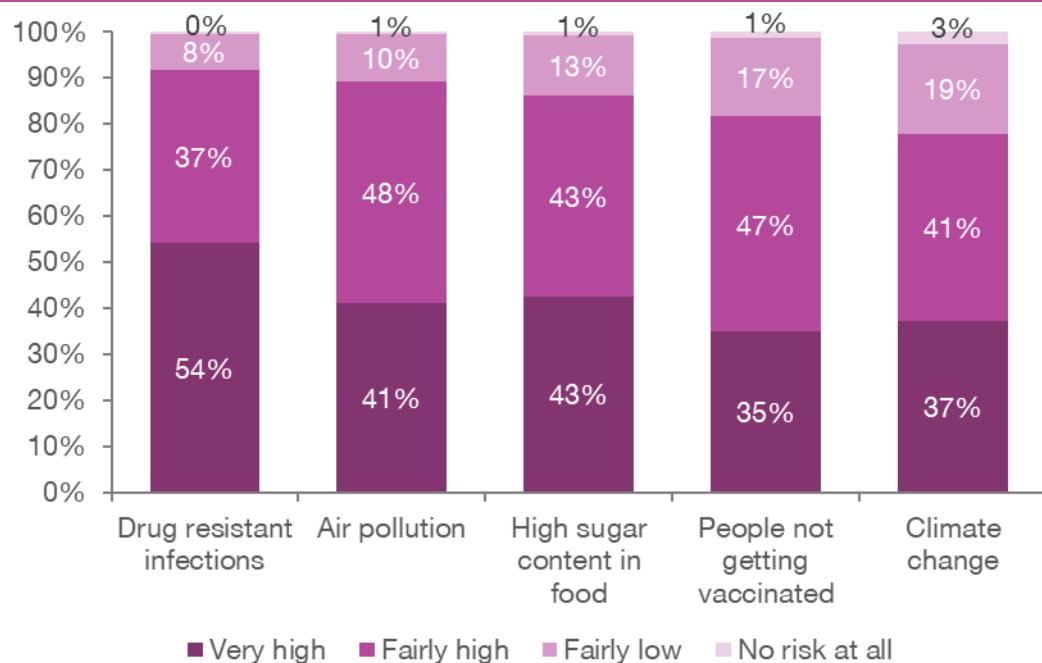
Key findings:

- For all five potential health threats mentioned – drug resistant infections, high sugar content in food, air pollution, climate change and people not getting vaccinated – a sizable majority deemed them to be at least a fairly high risk to public health. Drug-resistant infections and air pollution were deemed at least a fairly high risk to public health by the highest proportion of people (92 per cent and 89 per cent respectively).
- Women were more likely than men to judge all potential health threats to be a very high risk to public health.
- The four per cent of people who had persuaded a GP or medical professional to prescribe them antibiotics were less likely to view DRIs as a fairly or very high risk (81 per cent, compared to 92 per cent of those who have not persuaded a GP or medical professional to prescribe them antibiotics).

9.1 What are most serious risks to public health?

Figure 9:1 shows the extent to which people think that specific issues are a risk to public health. Overall, sizeable majorities deemed all the presented options to be at least a fairly high risk. Drug resistant infections (DRIs) and air pollution were most likely to be deemed at least a fairly high risk (92 per cent and 89 per cent respectively), followed by high sugar content in food (86 per cent), and people not getting vaccinated and climate change (82 per cent and 78 per cent respectively). DRIs were more likely (54 per cent) to be deemed a ‘very high’ threat to public health than the other options.

Figure 9:1 Perceptions of threats to public health

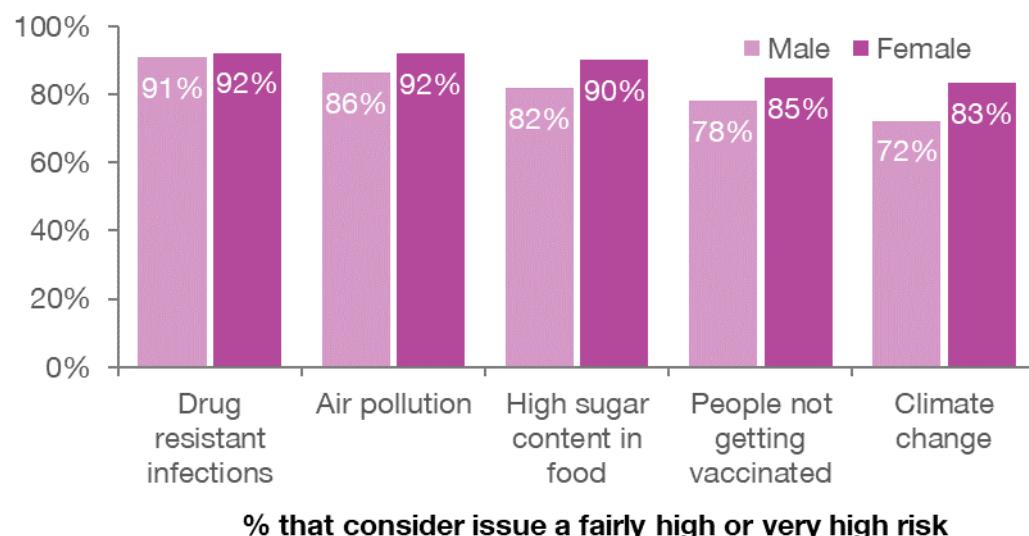


"How high a risk to public health, if any, do you think each of the following are?"

Bases (all GB adults 18+): DRIs (2688), People not getting vaccinated (2700), High sugar (2703), Air pollution (2707), Climate change (2702).

Figure 9:2 shows that women were more likely than men to judge all health threats except DRIs to be fairly or very high risks to public health.

Figure 9:2 Proportion considering threat level to be fairly or very high, by sex



% that consider issue a fairly high or very high risk

"How high a risk to public health, if any, do you think each of the following are?"

Bases: all GB adults 18+. DRIs: men (1137), women (1551). People not getting vaccinated: men (1142), women (1558). High sugar: men (1143), women (1560). Air pollution: men (1145), women (1562). Climate change: men (1143), women (1559).

There was also some variation by age group (Table 9:1): 18 to 29 year olds were less concerned about the public health risks of DRIs and high sugar content in food than the rest of the population, while concern about the public health risks of air pollution was higher amongst those aged 40 or over, and concern about people not getting vaccinated was higher among those aged 60 or over. There was no variation by age in the concern about the public health risks of climate change.

Table 9:1 Proportion considering level of threat to public health to be fairly or very high, by age group

	18-29	30-39	40-49	50-59	60-69	70+
Drug resistant infections	84%	92%	92%	93%	95%	93%
Air pollution	86%	85%	92%	89%	92%	91%
High sugar content in food	74%	86%	89%	88%	91%	89%
People not getting vaccinated	82%	79%	78%	81%	85%	85%
Climate change	78%	76%	82%	77%	76%	78%

Bases: all GB adults 18+. DRIs: 18-29 (237), 30-39 (444), 40-49 (458), 50-59 (507), 60-69 (532), 70+ (493). People not getting vaccinated: 18-29 (237), 30-39 (445), 40-49 (458), 50-59 (508), 60-69 (535), 70+ (501). High sugar content in food: 18-29 (236), 30-39 (447), 40-49 (459), 50-59 (506), 60-69 (535), 70+ (503). Air pollution: 18-29 (236), 30-39 (447), 40-49 (459), 50-59 (508), 60-69 (536), 70+ (504). Climate change: 18-29 (236), 30-39 (447), 40-49 (459), 50-59 (508), 60-69 (534), 70+ (502).

How high a risk to public health, if any, do you think each of the following are?"

There was no significant variation in the proportion judging each threat to be a fairly or very high risk by educational attainment, and little variation by measures of socio-economic status, including NS-SEC, subjective income, equivalised income, area deprivation (IMD) and subjective class identity.

The extent to which people viewed the different threats to be a risk to public health varied with interest in health research. For all types of risk, the proportion saying that the threat was a fairly or very high risk was roughly 10 percentage points higher amongst those who were very interested in health research than those who were not very or not at all interested.

Self-reported understanding of DRIs was strongly associated with the extent to which respondents said that DRIs were a risk to public health. Ninety-five per cent of those who reported a good or very good understanding of DRIs said that they are a fairly or very high risk to public health, falling to 79 per cent of those who said that they have heard the term but have little understanding of what it means.

There was no difference in perceptions of the health risk posed by DRIs between those who had asked a GP or medical professional to prescribe antibiotics. However, the four per cent of people who had persuaded a GP or medical professional to prescribe them antibiotics were less likely to view DRIs as a fairly or very high risk (81 per cent, compared to 92 per cent of those who have not persuaded a GP or medical professional to prescribe them antibiotics).

Those with accurate views regarding vaccines were more likely to see people not getting vaccinated as a threat to public health. Eighty-four per cent of those who said that there was a fairly low risk, or no risk at all, of serious side-effects from vaccines

said that people not getting vaccinated was a very high or fairly high risk to public health, compared to 72 per cent of those who said that there was a very high or fairly high risk of serious side-effects. Similarly, 86 per cent of those who responded correctly regarding the uses of antibiotics (by saying that antibiotics are always or almost always effective at preventing diseases and almost never or never effective at preventing them) said that people not getting vaccinated was a fairly or very high risk to public health, compared to 81 per cent of those who answered incorrectly.

10 Knowledge of and attitudes to DRIs, vaccinations and antibiotics

Drug Resistant Infections and Vaccines are strategic priority areas for Wellcome and the organisation is interested in understanding how the public view these areas to inform their work.

This chapter explores people's knowledge and attitudes towards drug resistant infections (DRIs), vaccinations and antibiotics. It begins by looking at antibiotics. People's understanding of antibiotics is assessed by looking at which kinds of conditions they believe can be treated by antibiotics. The extent to which people ask medical professionals to prescribe antibiotics is then examined, as well as the extent to which people try to convince medical professional to do so. It then turns to DRIs, and how well people rate their own understanding of the term, before examining how people think DRIs should be addressed and who is responsible for addressing them. Lastly, the chapter looks at public understanding of vaccinations, including perceptions of their effectiveness and the potential of serious side effects from their use.

Key findings:

- Most people knew that antibiotics can be used to treat bacterial infections (87 per cent). There were, however, a large number of wrong answers; 36 per cent said that antibiotics can treat viral infections, and 27 per cent said that they can treat fungal infections. Overall, 43 per cent answered correctly by *only* selecting bacterial infections.
- Self-reported understanding of the term 'drug resistant infections' was high, with over half (51 per cent) of people saying they had a good or very good understanding. Professed understanding was lowest amongst those aged 18 to 29, peaking amongst those aged 50 to 59, and falling again amongst those aged 70 or over. More educated people, people who are more interested in health research, and people who engage with health research more frequently all rate their understanding of DRIs as higher than others.
- Overall, people were very positive about the amount impact that people like themselves could have on DRIs, with 84 per cent saying that people like themselves can have at least a little impact.
- A majority of people think that when attempting to address DRIs, the most focus should be on encouraging people to use antibiotics correctly. Relatedly, doctors or nurses who prescribe antibiotics were most likely to be deemed most responsible for addressing DRIs (45 per cent).
- Forty-two per cent of people said they have asked a medical professional for a prescription of antibiotics. Of these, 86 per cent said they had subsequently been prescribed antibiotics. Of these, 11 per cent said they had to persuade the medical professional to give them the prescription. Overall, 4 per cent of people had asked for a prescription of antibiotics and been prescribed them after persuading. Younger people were more likely to have been prescribed antibiotics after persuading a GP or medical professional to prescribe them.

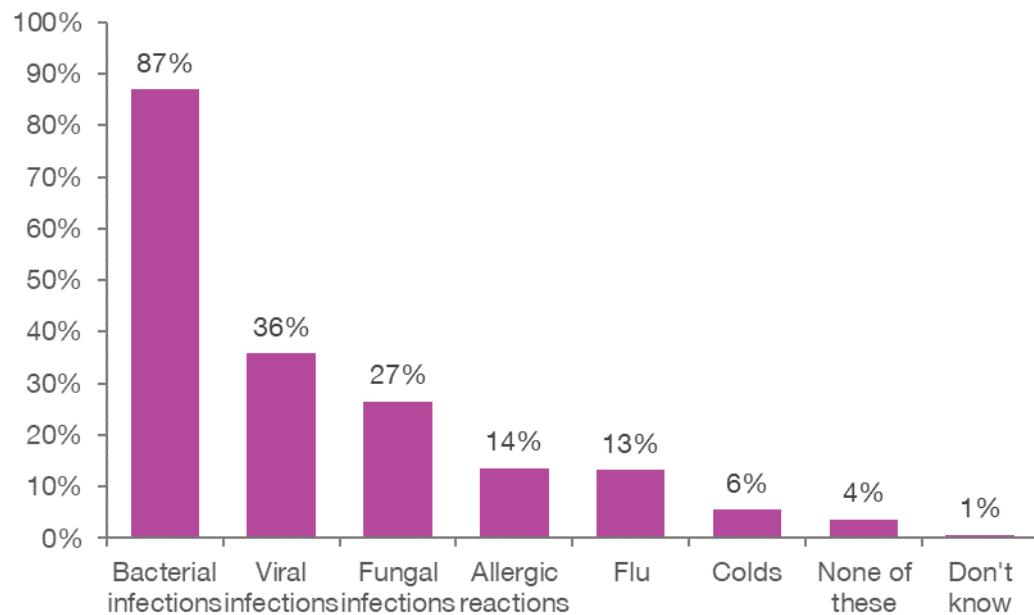
- Three questions were asked that assessed people's perceptions of vaccinations. Overall, perceptions were accurate: 81 per cent of people said that the risk of serious side-effects of vaccination was fairly low or that there was no risk at all, 69 per cent said that vaccines are almost always or always effective at preventing diseases. However, only 28 per cent said that vaccinations are almost never effective or never effective at treating diseases *after* they've been contracted, with 56 per cent saying that they are sometimes effective and sometimes not effective.

10.1 Antibiotics

10.1.1 Knowledge of antibiotics

Respondents were asked which kinds of conditions could be treated by antibiotics. Figure 10:1 shows eighty-seven per cent correctly said that bacterial infections can be treated by antibiotics. There were, however, a large number of wrong answers; 36 per cent said that antibiotics can treat viral infections, and 27 per cent said that they can treat fungal infections. Overall, 43 per cent answered correctly by *only* selecting bacterial infections, and 57 per cent answered incorrectly by either not selecting bacterial infections or by selecting another option in addition. This pattern is similar to that seen in Wave 3 of the Monitor.

Figure 10:1 Knowledge of the uses of antibiotics



"Which of the following conditions, if any, do you think can be treated effectively by antibiotics?"

Base: GB adults aged 18+ (2708)

Despite research showing that men say they know more about science than women¹⁵, women were significantly more likely to answer these questions correctly than men (50 per cent and 35 per cent respectively) by selecting bacterial infections only.

The proportion answering correctly also varied significantly by age group, rising from a low of 33 per cent of those aged 18 to 29 to a high of 49 per cent of those aged 40 to 49, and falling to 38 per cent of those aged 70 or over.

There was a clear trend of more educated respondents being more likely to answer correctly. Fifty-five per cent of those with a degree (or equivalent) or above answered correctly, falling to 26 per cent of those with no qualifications. There was a similar trend for all measures of socio-economic status used, including NS-SEC, subjective income, equivalised income, area deprivation (IMD), and class identity: 29 per cent of those in the lowest income group (less than £800 per month) answer currently, rising to 53 per cent of those in the highest income group (more than £2000 per month).

Those who were more interested in health research were more likely to answer correctly, falling from 48 per cent of those who were ‘very interested’ to 18 per cent of those who were ‘not at all interested’.

10.2 Drug-Resistant Infections

10.2.1 How well do people understand the term ‘drug resistant infections’?

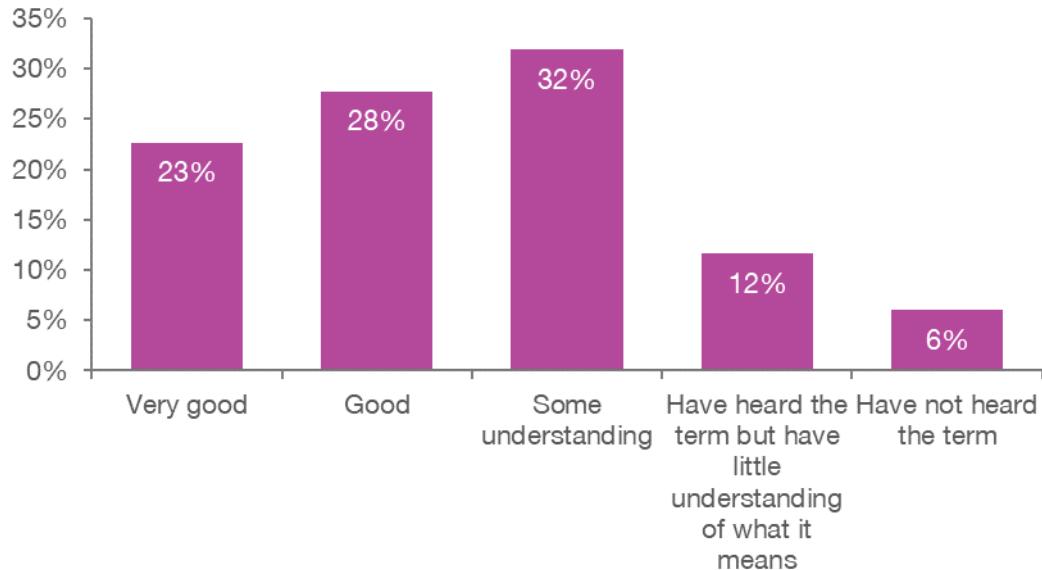
Wave 3 of the Monitor found that 56 per cent of people said that they had a good or very good understanding of the term ‘antibiotic resistance’, and that only 19 per cent had little understanding or had not heard the term. Since then Wellcome have used the term ‘drug-resistant infections’ after qualitative research found that the public found this term more accessible than ‘anti-microbial resistance’, which was used in the past.

As part of the pre-testing of the Wave 4 questionnaire, it was found that people are more familiar with the term ‘antibiotic resistance’ than ‘drug resistant infections’: 48 per cent of people reported a good or very good understanding of ‘drug resistant infections’, whilst 57 per cent reported a good or very good understanding of ‘antibiotic resistance’.

Wave 4 of the monitor asked people to rate their understanding of the term ‘drug resistant infections’ (DRIs). Figure 10:2 shows that self-reported understanding was high, with over half of respondents saying that they have either a “good” or “very good” understanding of the term, and only six per cent having not heard the term before.

¹⁵ The Wellcome Global Monitor found that 76 per cent of men said they knew some or a lot about science, compared to 58 per cent of women.

Figure 10:2 Understanding of Drug Resistant Infections



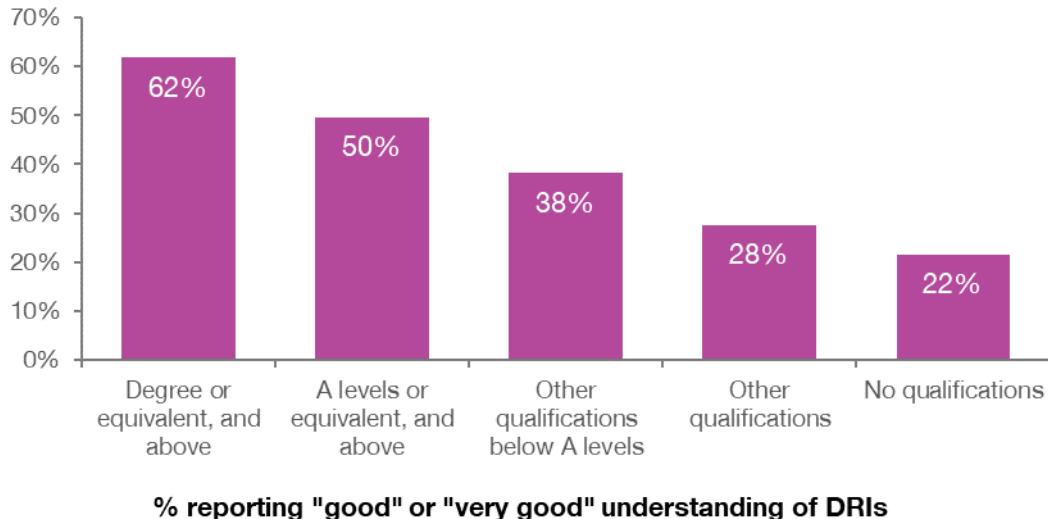
*"When you hear the term '**Drug resistant infections**', how would you rate your understanding of what the term means?"*

Base: GB adults aged 18+ (2705)

There was significant variation in self-reported understanding of DRIs by age. The proportion that said they have “good” or “very good” understanding was lowest amongst those aged 18 to 29 at 45 per cent, rising to 58 per cent of those aged 50 to 59, and falling again to 46 per cent of those aged 70 or over. This is broadly the same pattern as that found on previous waves of the Monitor with regards to asking about antibiotic resistance.

There was a strong association between self-reporting understanding of DRIs by highest educational qualification obtained (Figure 10:3): those with a degree (or equivalent) or above reported the best understanding, with 62 per cent saying they have a “good” or “very good” understanding, falling to 22 per cent of those with no qualifications.

Figure 10:3 Understanding of Drug Resistant Infections, by education



*"When you hear the term '**Drug resistant infections**', how would you rate your understanding of what the term means?"*

Base: GB adults aged 18+: degree or equivalent and above (1167), A levels or equivalent and above (565), other qualifications below A levels (462), other qualifications (200), no qualifications (297).

There was a strong association between self-reported understanding of DRIs and all measures of socio-economic status used, including NS-SEC, subjective income, class identity, equivalised income, and area deprivation (IMD). Looking at equivalised income, 40 per cent of those in the lowest income category (less than £800 per month) reported a 'good' or 'very good' understanding of the term, rising to 61 per cent of those in the highest income category (more than £2000 per month), with a similar pattern across all other measures of socio-economic status.

Self-reported understanding of DRIs was strongly related to degree of interest in health research, with those who expressed greater interest also claiming greater understanding. Sixty-four per cent of those who were "very interested" in health research reported having a "good" or "very good" understanding of DRIs, falling to 28 per cent of those who were "not at all interested" in health research.

Similarly, self-reported understanding of DRIs was strongly related to frequency of trying to find health-related information. Fifty-nine per cent of those who try to find health-related information at least once or twice a week reported "good" or "very good" understanding of DRIs, falling to 32 per cent of those who never try to find health-related information.

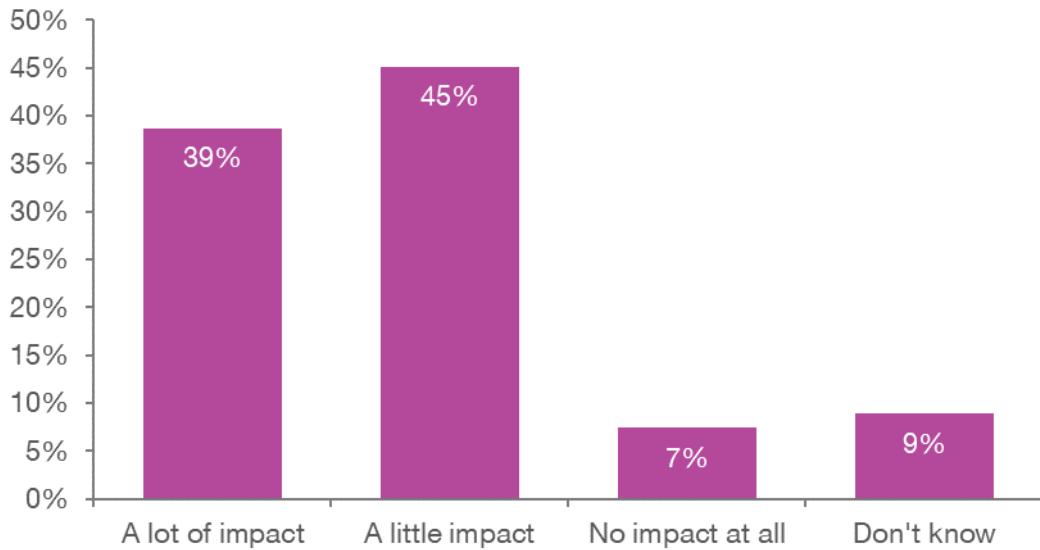
Those who correctly said that antibiotics can only be used to treat bacterial infections were much more likely to report a good or very good understanding of the term "Drug Resistant Infections" than those who answered incorrectly (67 per cent and 39 per cent respectively).

10.2.2 How much impact can individuals have on DRIs?

This section investigates whether the public think that addressing DRIs can be achieved through the responsible action of individuals. Respondents who reported at least some understanding of the term "Drug Resistant Infections" were asked how

much impact they thought people like themselves could have on DRIs. The results are shown in Figure 10:4. Overall, people felt that individuals could have an impact on DRIs: of the 82 per cent of people who had at least some understanding of the term, 84 per cent said that people like themselves could have at least ‘a little impact’, and only 7 per cent said that people like themselves could have no impact at all.

Figure 10:4 Impact of individual actions on DRIs



“How much impact do you think that the actions of individual people like yourself can have on drug resistant infections?”

Base: GB adults aged 18+ who have some understanding of DRIs (2361)

Those who reported a greater understanding of the meaning of the term were more likely to think that individuals' actions could impact DRIs. Of those who reported a 'very good' understanding, 92 per cent felt that an individual like themselves could have at least a little impact on DRIs, falling to 78 per cent of those who reported only 'some understanding'.

Those aged 70 or over were significantly less likely to think that the actions of people like themselves could make an impact on DRIs. Seventy-five per cent of those aged 70 or over said that people like themselves could have 'a little impact' or 'a lot of impact', compared to 85 per cent of all others.

Respondents with higher levels of educational qualification were more likely to think individuals' actions could make an impact. Ninety per cent of those with a degree (or equivalent) or above said that people like themselves could have at least a little impact on DRIs, falling to 83 per cent of those with qualifications below A level (or equivalent) and 73 per cent of those with no qualifications.

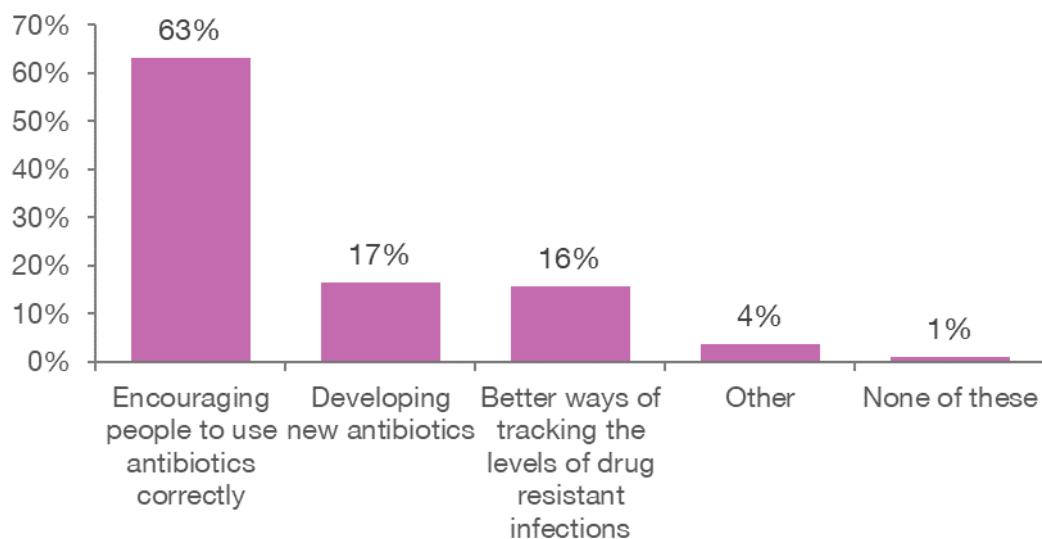
There was variation in the perception that individuals' actions could impact DRIs by measures of income (subjective income and equivalised income) but not by occupational or social class and deprivation (NS-SEC, class identity, area deprivation (IMD)). Looking at equivalised income, 78 per cent of those in the lowest income group (less than £800 per month) said that people like themselves could have at least a little impact on DRIs, rising to 88 per cent of those in the highest income group (more than £2000 per month), with a similar pattern for subjective income.

Those who correctly said that antibiotics can only be used to treat bacterial infections were more also more likely to say that people like themselves can have “a lot of impact” on DRIs than those who answered incorrectly (46 per cent and 32 per cent respectively).

10.2.3 Where should the focus be when attempting to address DRIs?

Respondents who reported at least some understanding of DRIs were also asked what they thought the *most* focus should be on in the attempt to address DRIs. The most common response was “Encouraging people to use antibiotics correctly” (63 per cent), followed by “developing new antibiotics” and “better ways of tracking the levels of drug resistant infections” (17 and 16 per cent respectively) (Figure 10:5).

Figure 10:5 How should DRIs be addressed?



*“Which, if any, of the following do you think the **most** focus should be on for addressing drug resistant infections?”*

Base: GB adults aged 18+ who have some understanding of DRIs (2354)

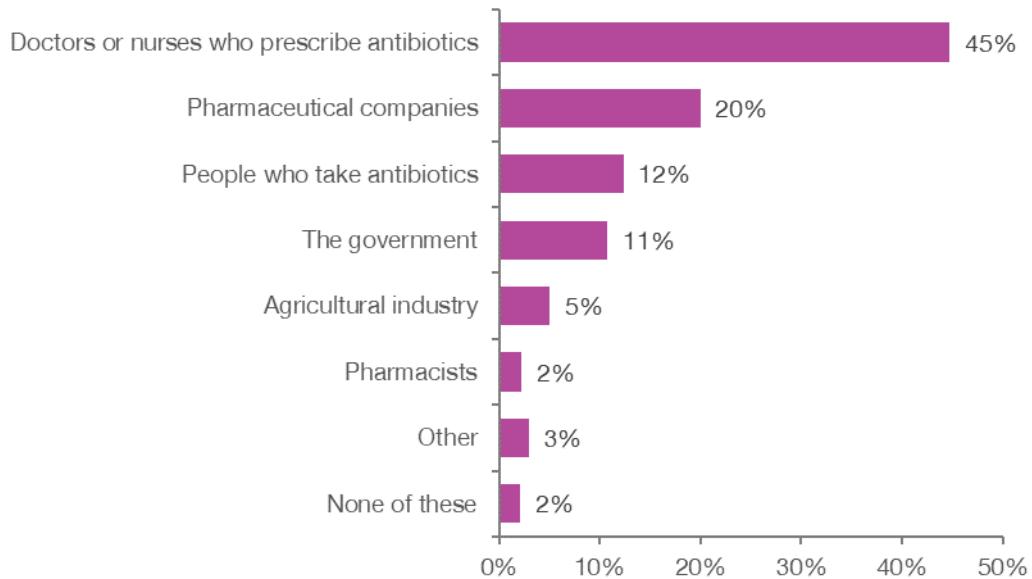
Four per cent of respondents selected “Other” and gave an open text response (n=106). The most common type of answer stressed the need to stop or reduce the use of antibiotics in agriculture and food production: respondents mentioned the need to stop the “routine” use of antibiotics, and some specifically mentioned their use as prophylactics.

10.2.4 Responsibility for addressing DRIs

People who reported at least some understanding of DRIs were also asked which individuals or organisations they thought were *most* responsible for addressing DRIs. The results are shown in Figure 10:6. Doctors or nurses who prescribe antibiotics were most likely to be deemed most responsible, at 45 per cent – more than twice the proportion of people who selected the next most common answer, pharmaceutical companies (20 per cent). Despite a large proportion of people feeling that people like themselves can make an impact on DRIs, 12 per cent felt that people who take antibiotics were the most responsible for addressing DRIs. Eleven per cent felt that the

government was most responsible, and relatively few people said that the agricultural industry or pharmacists were most responsible (five and two per cent respectively). Of those who selected “Other”, the most common answers were that “everyone” or “all of us” bear responsibility.

Figure 10:6 Responsibility for addressing DRIs



*“Which, if any, of the following do you think are **most** responsible for addressing drug resistant infections?”*

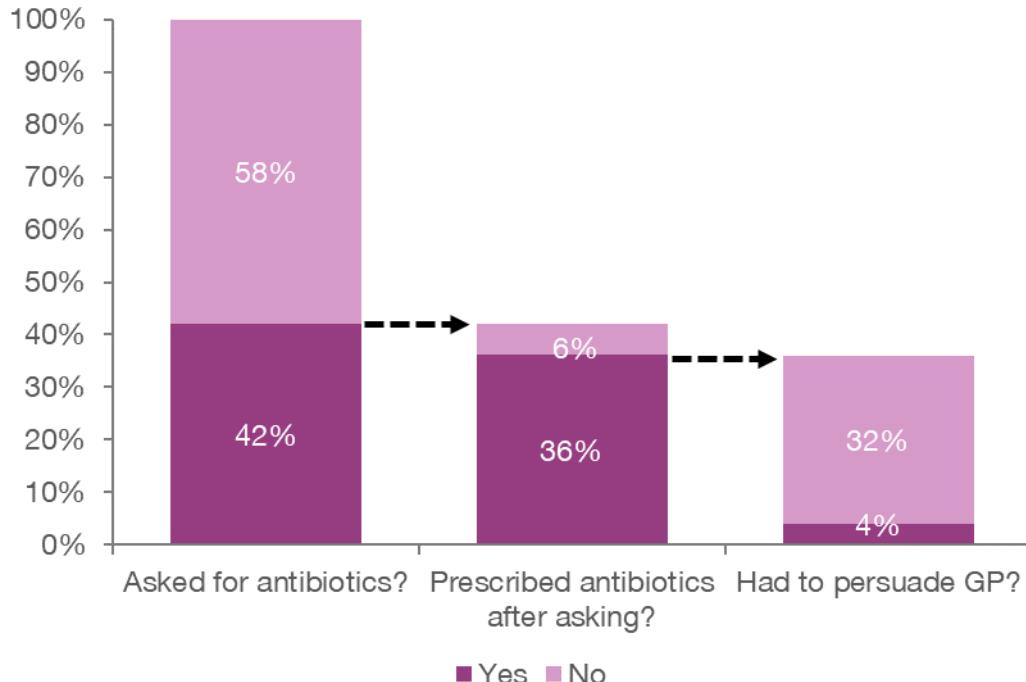
Base: GB adults aged 18+ who have some understanding of DRIs (2344)

Those who thought that the actions of individuals could have an impact on DRIs were more likely to say that people who take antibiotics were most responsible for addressing DRIs, rising from 6 per cent of those who thought individuals could have no impact at all to 18 per cent of those who thought individuals could have a lot of impact.

10.2.5 Asking for a prescription of antibiotics

Respondents were asked whether they had ever asked a GP or medical professional to prescribe them antibiotics. Forty-two per cent said that they have. These respondents were then asked whether the last time they asked for such a prescription the GP or medical professional gave them one. Eighty-six per cent said that they had. Finally, respondents who asked for and were given a prescription for antibiotics were asked if they had to persuade the GP or medical professional to give them the prescription, and 11 per cent said that they had. Overall, four per cent of people had asked a GP or medical professional for a prescription of antibiotics and been given a prescription after persuading the GP or medical professional (Figure 10:7).

Figure 10:7 Asking for a prescription of antibiotics



*"Have you ever asked a GP or other medical professional **to prescribe you antibiotics/did they give you a prescription for antibiotics / did you have to persuade them to give you a prescription for antibiotics, before they did so?"***

Base: GB adults aged 18+ (2707)

In 2015 on Wave 3 of the Monitor, only 21 per cent of people had asked for a prescription of antibiotics, compared to 42 per cent in 2018. However, caution should be used when interpreting this difference, as it may be the result of mode effects: Wave 3 was conducted face-to-face, and respondents may have been more reluctant to say they had asked for antibiotics. The proportion of people who were prescribed antibiotics after asking, and the proportion who had to persuade in order to get the prescription, are broadly similar between 2015 and 2018.

Women were more likely to say that they have asked a medical professional for a prescription of antibiotics than men (44 per cent and 39 per cent respectively), but of those who have asked for a prescription, women were no more likely to receive one, and of those who have received a prescription after asking for one, women were no more likely to have persuaded the medical professional to give them the prescription. Overall, there was no significant difference between men and women: 5 per cent of women have been prescribed antibiotics after persuading a GP or medical professional, compared to 3 per cent of men.

Younger age groups were more likely to have asked a medical professional for a prescription of antibiotics, to have subsequently been given a prescription, and to have had to persuade the medical professional to give them this prescription. Forty-five per cent of those aged 18 to 29 said that they have asked for a prescription of antibiotics, falling to 29 per cent of those aged 70 or over. Of those who had asked for a prescription of antibiotics, those aged 18 to 29 were more likely than all other age groups to say that they were given the prescription (95 per cent and 85 per cent respectively). Of those who were given a prescription after asking for one, 16 per cent

of those aged 18 to 29 said that they had to persuade the medical professional, falling to 5 per cent of those aged 70 or over. Overall, the proportion of people who have been prescribed antibiotics after persuading a GP or medical professional falls with age, from seven per cent of those aged 18 to 29 to one per cent of those aged 70 or over.

There was no variation in the proportion of people who said they have asked for a prescription of antibiotics by level of education or measures of socio-economic status including equivalised income and NS-SEC.

Parents with children aged under 18 in the household were significantly more likely to have asked for a prescription of antibiotics than those without (48 per cent and 38 per cent respectively), but no more likely to then be given a prescription, or to have had to persuade the medical professional. There was no difference overall in the proportion of people who have been prescribed antibiotics after persuading a GP or medical professional between those who were parents living with children under 18 and those who were not.

Those who try to find health-related information more frequently were more likely to have asked for a prescription: 47 per cent of those who try to find health-related information at least once or twice a week, falling to 29 per cent of those who never try to find health-related information. Overall, six per cent of those who try to find health-related information at least once or twice a week have been prescribed antibiotics after persuading a GP or medical professional, falling to 2 per cent of those who never try to find health-related information¹⁶.

Those who answered the question about the kinds of conditions that can be treated by antibiotics incorrectly were no more or less likely to ask a GP or medical professional to prescribe antibiotics. However, of those that asked for and got a prescription for antibiotics, those that answered incorrectly regarding the uses of antibiotics were twice as likely to have persuaded the GP or medical professional to give them the prescription as those who answered correctly (14 per cent and 7 per cent respectively). Overall, those who knew less about the uses of antibiotics were more likely to have been prescribed antibiotics after persuading a GP or medical professional than those with more knowledge (5 per cent compared to 3 per cent).

Relatedly, those who reported not having heard or having little understanding of the term “drug resistant infections” were most likely (51 per cent) to report having asked a GP or medical professional to prescribe antibiotics, compared to 38 per cent of those with good or some understanding of the term. However, there was no difference in the proportion of those who asked for a prescription who were given one, or in the proportion of those who were given one who had to persuade the medical professional. There was therefore no variation in the proportion of people who have been given a prescription of antibiotics after persuading a medical professional by degree of understanding of DRIs.

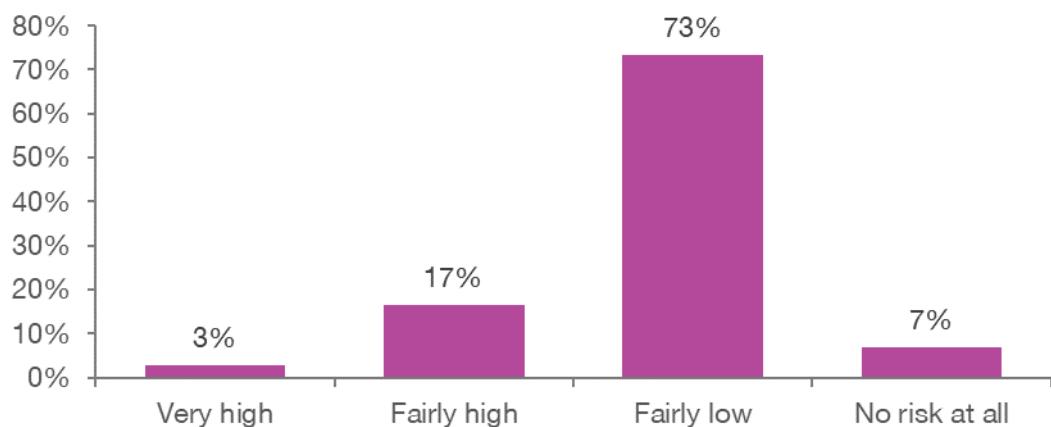
¹⁶ Significant at the 10% level

10.3 Knowledge of, and attitudes towards, vaccinations

Vaccines are a priority area for Wellcome and while people in the UK tend to be more positive about vaccines than people in other European countries, concerns about safety are higher compared to the rest of the world¹⁷.

Respondents were asked three questions targeted at understanding their knowledge of and attitudes towards vaccines. The first of these asked how high respondents thought the risks of serious side-effects are from vaccines (Figure 10:8). The actual overall risk of side effects from vaccines is extremely low. Whilst a sizeable majority (80 per cent) said that the risk was either fairly low or that there was no risk at all, 20 per cent said that the risk was fairly or very high. Given that 95 per cent coverage is needed to attain herd immunity it's worth noting that 20 per cent of GB adults believe that there's very high or fairly high chance of side effects¹⁸.

Figure 10:8 Risk of serious side-effects from vaccines



"On average, how high, if at all, would you say the risks of serious side-effects are from a vaccination?"

Base: GB adults aged 18+ (2694)

Whilst there is variation in the efficacy of vaccines across different diseases and across individuals, as well as variation in the duration of the resulting immunity, vaccines are generally a highly effective means to prevent diseases.

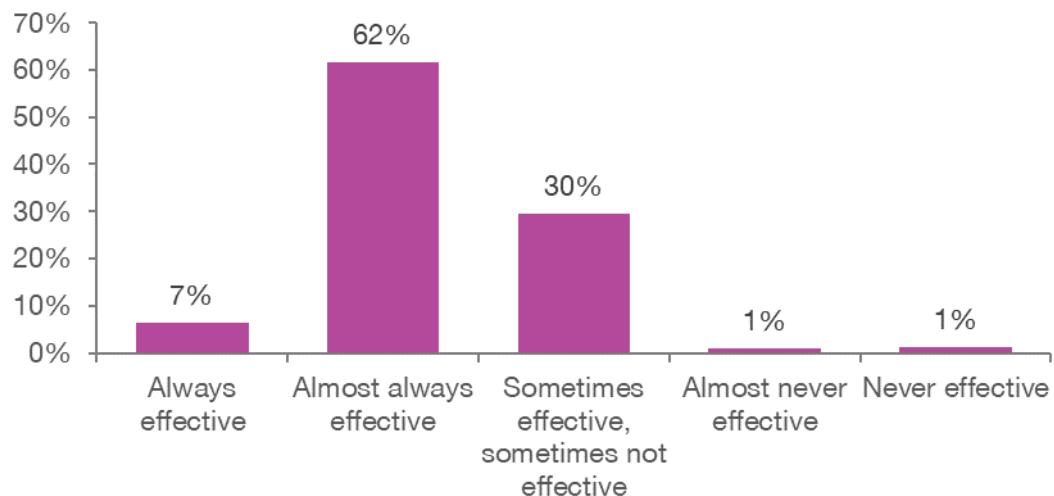
Consequently, the second and third questions were aimed at understanding the extent to which people are aware that the primary use of vaccinations is the *prevention*, rather than the *treatment*, of disease. These asked how often, if ever, respondents thought that vaccines are effective at preventing disease, and treating diseases after they have been contracted.

¹⁷ According to the Wellcome Global Monitor conducted in 2018, just under a half of the UK (46 per cent) strongly agreed that vaccines are safe – significantly higher than the rest of Europe (40 per cent) but much lower than the global figure (61 per cent).

¹⁸ See Bulletin of the World Health Organisation. Vaccination greatly reduces disease, disability, death and inequity worldwide. <https://www.who.int/bulletin/volumes/86/2/07-040089/en/>

Overall, people were more likely to say that vaccines are effective at prevention than effective at treatment: 68 per cent of people said that vaccines were always or almost always effective at preventing disease (Figure 10:9), compared to just 16 per cent of people who said that they are always or almost always effective at treating disease (Figure 10:10). However, there were a large number of less accurate answers to both questions, with 30 per cent of people saying that vaccines are only sometimes effective and sometimes not effective at preventing disease, and a majority (56 per cent) saying that vaccines are sometimes effective and sometimes not effective at treating disease. Only 28 per cent of people said that vaccines are never or almost never effective at treating disease.

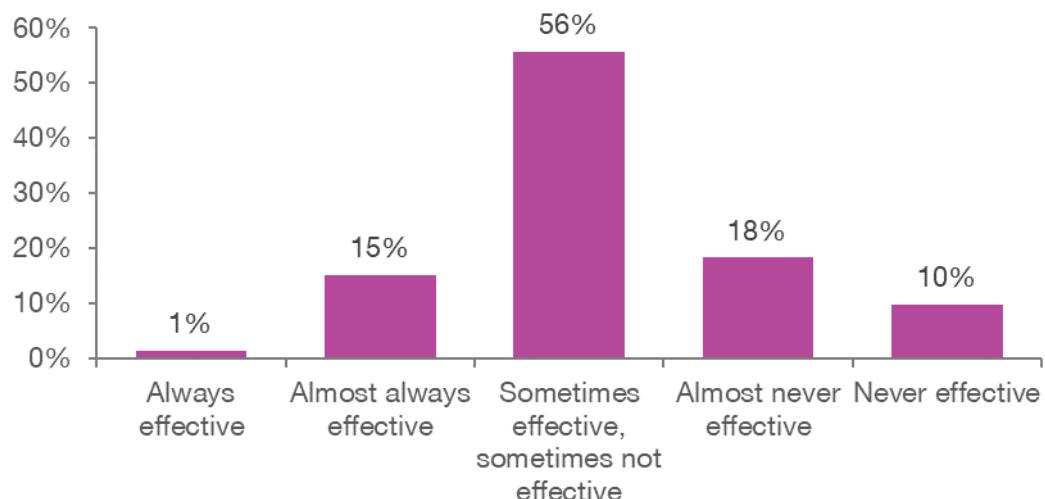
Figure 10:9 Effectiveness of vaccines at preventing disease



"How often, if ever, would say vaccines are effective at preventing diseases?"

Base: GB adults aged 18+ (2694)

Figure 10:10 Effectiveness of vaccines at treating diseases after contracted



*"How often, if ever, would you say vaccines are effective at treating diseases **after** they've been contracted?"*

Base: GB adults aged 18+ (2660)

Very few therapeutic vaccines¹⁹ (treating the disease after its contracted) are currently licensed, but if given in time they almost always effective.

There was no variation by sex in views regarding the risk of serious side-effects from vaccines. However, women were more likely to say that vaccines are almost always or always effective at preventing diseases than men (72 per cent and 64 per cent respectively), and less likely to say that vaccines are almost always or always effective at treated diseases after they've been contracted (14 per cent and 19 per cent respectively).

There was no significant variation by age in answers to any of three questions relating to vaccines.

More educated respondents were more likely to have accurate views regarding vaccinations:

- Twelve per cent of those with a degree (or equivalent) or above said that there is a “fairly high” or “very high” risk of serious side-effects, rising to 28 per cent of those with no qualifications.
- Seventy-eight per cent of those with a degree (or equivalent) or above said that vaccines are almost always or always effective at preventing diseases, falling to 56 per cent of those with no qualifications.
- Twelve per cent of those with a degree (or equivalent) or above said that vaccines are always or almost always effective at treating diseases after they've been contracted, rising to 25 per cent of those with no qualifications.

There was consistent variation in answers to all three questions on measures of socio-economic status, including NS-SEC, subjective income, class identity, equivalised income, and area deprivation (IMD), with those on lower incomes, or in more deprived areas, or identifying as working class tending to have less accurate views regarding vaccinations. Looking at equivalised income, those in the lowest income group (less than £800 per month) were more likely than those in the highest income group (more than £2000 per month) to say that the risks of serious side effects from vaccines are fairly or very high (28 per cent compared to 13 per cent), less likely to say that vaccines are always or almost always effective at preventing diseases (57 per cent compared to 76 per cent), and more likely to say they were always or almost always effective at treating diseases after they have been contracted (21 per cent compared to 13 per cent).

¹⁹ An example of this is the BCG vaccine which can generate an immune response for bladder cancer <https://www.macmillan.org.uk/information-and-support/treating/targeted-biological-therapies/immunotherapy-explained/vaccines.html>

11 Reflections

The Wellcome Monitor Wave 4 report contains a wealth of insight about how the public relate to health research and health issues that will be of use to those aiming to engage the public in this field.

As per previous Waves of the survey a very high proportion of the public were interested in health research and the issues it covers, in particular mental health. The public considered health research funding to be a high priority and believe that they should be involved in setting priorities for this research. These findings provide an evidence base for public engagement. While the dominance of the internet in how the public engage with medical research is not new, for the first time the Monitor covers how they are engaging with it in this space. The popularity of social media, especially among young people, will pose a threat in terms of misinformation but will also create opportunities for the public to critically engage with new health research in greater numbers.

Trust in medical professionals remained high, but these findings illustrate the challenges in providing the public with information they deem to be legitimate. For example, while the media is the source they were most likely to use for health research information, it was also the one they were least likely to trust, and while many trusted academics, few read what it is they say.

The findings also highlight fascinating differences between generations in terms of engagement with health and medicine. The oldest were less likely to use the web for accessing health information and while older people relied on the advice of health professionals for making decisions about their own health, young people were more likely to look for information first. Older people were also more confident in challenging the advice of medical professionals. Such results could have important implications for issues of increasing concern, such as mental health, where younger people might feel less compelled to speak to a professional and prefer to find solutions online.

Mental health continued to be an area of health research in which the public were interested. However, when asked about what mental health research was, while many had some understanding, just over half were not able to say what mental health researchers did.

In other priority areas for Wellcome – Vaccines and Drug resistant infections (DRI) – the public showed strong engagement. When compared to other threats to public health, people saw drug resistant infections as the greatest threat. It is encouraging also that people agreed that their behaviour can have a positive impact on DRIs although the chief responsibility was felt to be the doctors and nurses who prescribe antibiotics. Nonetheless a significant proportion had asked their doctor to prescribe antibiotics.

The public generally showed a good understanding of these issues but there are still gaps that could pose a challenge to public health. People understood that antibiotics treat bacterial infections but some mistakenly thought they could treat viral infections.

Similarly, while most understood that the risk of side effects from vaccines is low, a small but significant proportion felt that it was high.

For engagement in health research and health issues to be successful across the whole of society it is important not just to celebrate the public's support for health research but also actively engage with those individuals or communities who feel disconnected either through distrust or lack of access to reliable information.