

The State of the Migraine Nation

Who is living with migraine in the UK?

Rapid research review



Foreword

For the past 54 years, The Migraine Trust has worked to make sure that people affected by migraine are heard. We're proud of the work we've done to advance migraine research and understanding. But we also know we still have a long way to go to make sure that every person with migraine has the best life possible.

That's why we started work on [a 'State of the Migraine Nation' report](#). Our report will map the progress our community has made, identify the issues that matter most to people with migraine today and draw our community together around a number of shared priorities for the future.

The report will be launched at our 18th Migraine Trust International Symposium (MTIS) Public Day in London on 13 September 2020. Between then and now we'll be gathering evidence to inform the report's recommendations, including this rapid review looking at the characteristics of the UK migraine population. This is the first of three planned reviews we're releasing as part of this project.

We wanted to review this topic because there is a growing consensus amongst UK migraine researchers that we need to know more about the UK migraine population if we're going to inspire new lines of research and make a more compelling case to decision makers for more focus, funding and prioritisation.

This review is a first step at pulling together the research about the characteristics of people living with migraine. As you will read, despite the high prevalence of migraine, many aspects of our community remain critically under researched.

We hope this review will, among other things, help to focus the minds of the UK research community on the evidence gaps that need to be filled in order to help achieve change for people with migraine.

Please do let us know what you think about the findings by emailing policy@migrainetrust.org or tweeting us using the hashtag #MigraineNation.



Gus Baldwin
Chief Executive

Main messages

How many people live with migraine in the UK?

Migraine is a serious neurological condition which can have debilitating effects such as pain, nausea and visual disturbances. It is estimated that around 10 million adults in the UK are affected (between 15% and 23% of the adult population, depending on the definitions used).

As part of our 'State of the Migraine Nation' project, The Migraine Trust wanted to understand what has been researched about the characteristics of people living with migraine and what remains to be learnt. This rapid review draws on 68 studies about people with migraine living in the UK and elsewhere.

Characteristics of people living with migraine

Research from the UK and other countries suggests that migraine affects both children and adults, though there is little information about the number of children affected. Rates of diagnosis are highest in working age people. Migraine is more commonly diagnosed in women than men. One explanation relates to hormones.

Very little is known about the ethnic groups or socio-economic status of people living with migraine in the UK or whether there are differences regionally or in urban and rural locations. Under diagnosis adds to the knowledge gaps.

Gaps in knowledge

Migraine is the third most common health condition in the world. It is more common than diabetes, asthma and epilepsy combined. Around one in five adults in the UK may be living with migraine, but there is very little published about the characteristics of these people, where they live or the type of migraine they have.

Some information about people's age and gender is available from a study two decades old. More up to date information is available about the number of people living with migraine from a study conducted in 2016, but there appears to be a lack of basic information about the characteristics of these people that might help to plan effective support strategies. The dearth of research is a call to action, showing gaps that need to be filled in order to address this significant public health issue and achieve change for people with migraine.

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Acknowledgements

This rapid review was produced for The Migraine Trust by an independent organisation, The Evidence Centre, in January 2020. To maintain the independence of the review, it has not been edited by The Migraine Trust. The review summarises the findings from published research. That research does not necessarily reflect the views of The Migraine Trust or The Evidence Centre.

Background

Scope

Migraine is a complex condition with a wide variety of symptoms, often including painful headaches. Other symptoms include feeling unwell, vomiting, disturbed vision and sensitivity to light, sound and smells. The symptoms vary from person to person and between different attacks. Migraine attacks can have a major impact on people's work, family and social lives.

Migraine is the third most common health condition in the world, after dental caries and tension type headache. It is estimated that about one in seven people throughout the world (15%) live with migraine.¹ Migraine is more common than diabetes, asthma and epilepsy combined.²

The Migraine Trust is the largest research and support charity for people affected by migraine in the UK. Our role is to fund and promote new research into migraine, provide day to day support for people affected by migraine and campaign for change. The Migraine Trust wanted to understand what is known about the characteristics of people living with migraine in the UK, the 'migraine community', and what remains to be learnt.

This rapid review addresses the question:

What research is available about the characteristics of people living with migraine in the UK?

This review forms a part of The Migraine Trust's 'State of the Migraine Nation' programme, a project that seeks to identify the issues that matter most to people with migraine and draw the migraine community together around shared priorities for change.

Approach

The Migraine Trust wanted to summarise themes from recent published research. to understand what is known and where there may be gaps.

To identify relevant research, an independent team searched 25 bibliographic databases.¹ More than 2,000 studies were read to see whether they contained relevant information. Studies were eligible to be summarised if they:

- were published in a journal, book or online
- were published between January 2000 and December 2019
- were of any research design as long as they included empirical data
- focused on the characteristics of people living with migraine in the UK. As limited UK research was found, examples of studies about people living in other regions, particularly Europe, North America and Australasia, were also examined to provide background information. Studies from these other countries were not the primary focus

Opinion pieces and articles that did not contain empirical data were not included. Neither were studies about the causes or risk factors for migraine because the focus was on characteristics of the migraine population.

Fifty four studies with relevant information were included, 22 from the UK and 46 from other countries. All of the studies were read and the themes were extracted, grouped and summarised.

A systematic process was used to identify research, but the rapid review did not aim to be an exhaustive overview of all information about the characteristics of people living with migraine in the UK. The Migraine Trust is carrying forward a wide variety of evidence gathering activities, including workshops and surveys, to add to the research findings and better understand the state of the nation related to migraine in the UK. This rapid review is one step in that journey.

1 The databases were Ageline, Academic Search, Cumulative Index of Nursing and Allied Health Literature, the Cochrane Library and Controlled Trials Register, Current Contents, EMBASE, Global Health, Google Scholar, IngentaConnect, Jurn, JournalSeek, Mendeley, OpenSIGLE, PMC, PsycINFO, Pubmed, PubPsych, NHS Evidence, ScienceDirect, Science.gov, ScienceOpen, SearchTeam, Scopus, Web of Science and WorldWideScience.

Population characteristics

Number of people affected

What is migraine?

Migraine is a disabling neurological disorder that can have a variety of symptoms. It usually involves a headache on one side of the head with throbbing or pulsating pain.

The International Classification of Headache Disorders, recognised by the World Health Organization (WHO), identifies several types of migraine.³ The most common types are migraine with aura, migraine without aura and migraine aura without headache. The term 'aura' usually refers to visual disturbances including coloured spots, blind spots and flashing lights in front of the eyes.

One of the things that differentiates migraine from other headache disorders is the intensity of pain and disability that people experience.⁴ Migraine attacks usually last between four and 72 hours. Migraine is often described as 'episodic' if symptoms occur between one and 14 days per month, or 'chronic' if symptoms occur on 15 or more days per month.⁵

It is thought that migraine may be partially inherited. Stress may trigger migraine as may environmental factors. An international review of literature found that people living with migraine commonly reported triggers such as changes in barometric pressure, bright sunlight, flickering lights, air quality and odours. Few empirical studies confirm environmental influences, but it has been found that people living with migraine have lower thresholds for discomfort from lighting, noise and smell compared to other people.⁶

Research from around the world has sought to examine the prevalence of migraine, that is, the proportion of people living with migraine at a set point in time. These studies usually survey people about whether they live with or have been diagnosed with migraine. These types of studies may use strict diagnostic criteria (such the International Classification of Headache Disorders) when defining whether people live with migraine. Such research may potentially underestimate the number of people living with migraine because people that meet most but not all of the criteria are not counted.

Other studies include 'probable' migraine, where people meet most but not all international criteria. Others rely on self report, asking people whether they live with or have been diagnosed with migraine.

As different studies use varying definitions and measures of migraine it can be difficult to make comparisons between countries or to track changes in prevalence over time. Readers should bear in mind these methodological issues when interpreting the findings of the review.

UK research

It is estimated that around 10 million adults in the UK are living with migraine. The number of children affected by migraine in the UK is unclear.

The most up to date empirical information about the proportion of people living with migraine in the UK comes from the Global Burden of Disease Study in 2016. The proportion of people aged 15 to 69 years living with migraine was estimated at around 23%. About 9% of children aged 5 to 14 years were estimated to be living with migraine. These prevalence figures include 'probable migraine' (that is, people who met all but one of the diagnostic criteria and so probably have migraine).⁷ They are based on a survey of people from many countries, including a sample from the UK.

Earlier estimates of the proportion of adults living with migraine in the UK were about 15%, based on a random telephone survey of over 4,000 people in England aged 16 to 65. This study was conducted about two decades ago and did not include 'probable' migraine.⁸

Migraine was the third leading cause of ill health in the UK in 2016 (measured through average 'years living with disability'), following low back and neck pain and skin and subcutaneous diseases.⁹

A study using the UK General Practice Research Database explored data from 51,688 people with a first time diagnosis of migraine between 1994 and 2001 and a matched comparison group. The migraine incidence was 3.69 cases per 1000 person years.¹⁰

International research

Estimates of the prevalence of migraine in different parts of the world range from about 2% to 22% of the population.¹¹ Overall, the proportion of people living with migraine throughout the world is estimated at 12%.¹²

A number of large population based studies in the USA have estimated how many people live with migraine. Estimates in different studies ranged from 16% to 23%. This shows that even in large well conducted studies using similar methods, there is not a straightforward answer to how common migraine is.¹³ A review of these national population based government surveys found that the prevalence of migraine in the USA had remained stable for the past two decades.¹⁴

Another review of 302 community based studies combined data from more than 6.2 million people around the world. The global prevalence of migraine was 12%. The average proportions were about 11% of the population in Europe, 10% in each of Africa, Asia and North America and 16% in Central and South America.¹⁵

An example of an international prevalence study is a telephone survey of more than 1,000 people conducted in each of the UK, France, Germany, Italy and the USA. The proportion of people meeting the International Headache Society criteria for migraine ranged from 5% to 12%, with an average of 9%.¹⁶ Most attacks were classified as fairly to very 'severe' in intensity. Between 23% and 42% of people living with migraine reported more than 24 attacks in the past 12 months. About half did not seek medical advice. In the UK as in other countries, the most commonly used treatment was simple over the counter pain killer medications.¹⁷

However these figures may be lower than the real prevalence because people may not be aware that their symptoms are migraine, they may not have been diagnosed or because the researchers may only have 'counted' people who met every strict diagnostic criteria.

A study in Australia sought to test whether the real prevalence might be higher by exploring the proportion of neurologists that said that they lived with migraine. 66% of neurologists surveyed said they had a personal history of migraine. The researchers suggested that neurologists may be more knowledgeable about the symptoms of migraine and so be able to accurately state their condition. They believed that that the proportion of people living with migraine in the general population may also be higher than previously known but go unrecognised.¹⁸

As well as uncertainty about the number of people living with migraine, there is also a lack of information about different types of migraine. A review of 64 studies from around the world found that there is very little information about the prevalence of different types of migraine including probable versus diagnosed migraine, chronic migraine and menstrual migraine in young women.¹⁹

A review of 12 international studies explored the prevalence of chronic migraine, defined as migraine that occurred on 15 or more days per month or using other criteria. Most estimates of the prevalence of chronic migraine ranged between 1% and 2% of the population.²⁰

Age

UK research

Migraine affects both children and adults, but in the UK more is known about migraine in adults than children. It is estimated that 3% to 10% of UK children live with migraine, with the prevalence rising as children reach puberty.²¹ The 2016 Global Burden of Disease Study found that around one in ten UK children aged 5 to 14 years may be living with migraine.

The Global Burden of Disease Study also found that in the UK, as in other countries, the prevalence of migraine is highest during early adulthood (see Table 1).

Table 1: Age and gender trends in the prevalence of migraine in the UK²²

Age group	Female	Male	Total
5 to 14 years	9%	9%	9%
15 to 49 years	35%	16%	25%
50 to 69 years	24%	12%	18%
70+ years	9%	6%	8%

These data are in line with a UK study that drew on NHS data to map which sections of the population are susceptible to different health conditions at various ages. Based on data from more than two million people, migraine first gained prominence as a prevalent condition between the ages of 20 to 29 years.²³

International research

There are similar trends in international research. For instance, a review that combined data from 6.2 million people around the world found that the average age of people with migraine was 35 years. About 12% of school / college students were estimated to be living with migraine.²⁴

A review of national US surveys found that migraine was most commonly reported in those aged 18 to 44 years (18%).²⁵

A review of 50 international studies estimated the prevalence of migraine in children and adolescents (aged under 20 years) to be about 8%.²⁶

Gender

UK research

Migraine affects two to three times as many women as men. The 2016 Global Burden of Disease Study estimated that 24% of women in the UK are living with migraine or probable migraine compared to 12% of men.²⁷

Further evidence comes from a study in 253 UK general practices. Data were analysed for people aged 15 and older diagnosed with migraine or headache between 1992 and 2000. Key findings included:

- Consultation rates for migraine were 6.4 per 100 women per year and 2.5 per 100 men.
- Consultation rates were highest amongst those aged 15 to 24 years (15.8 per 100 in women and 5.8 per 100 in men) and decreased with age.
- Migraine medications were prescribed at 37% of 'headache consultations' for women and 27% for men.
- 2.1 out of every 100 consultations for migraine / headache were referred to a neurology specialist. This rate was higher in men than women (2.7 versus 1.9 per 100).

The researchers concluded that primary care consultation rates for migraine were highest in young women but hospital referrals were more common for middle aged men.²⁸

Some UK research has explored why migraine may be more prevalent in women than men. This may be due in part to hormonal factors and genetic differences.^{29,30,31} One study examined the number of migraine attacks during different phases of women's menstrual cycles. It found a higher number of attacks when oestrogen was falling and a lower number of attacks during rising phases of oestrogen.³²

There may also be under reporting and under diagnosis in men.

International research

These trends are similar to research in other countries. International research suggests that before puberty, around equal numbers of boys and girls experience migraine (4%). From puberty onwards, females are more likely to report symptoms of migraine than males.³³

A review that combined data from 6.2 million people around the world found that about 7% of males lived with migraine and 14% of females.³⁴

Compared to men, women report longer durations of migraine attacks, greater headache recurrence, greater disability and more time required to recover from a migraine attack.³⁵

A study in the USA compared the severity of migraines experienced by women at different stages of their menstrual cycle. Migraines during a woman's period were longer, more likely to cause impairment and were more likely to recur within 24 hours. The researchers concluded that there are differences between menstrual and non menstrual episodes of migraine that may benefit from different types of care.³⁶

Other characteristics

UK research

Ethnic group

There is no recent comprehensive data about the ethnic groups of people living with migraine in the UK. A study from two decades ago found that White people were twice as likely to live with migraine as those from Asian, Black and other ethnic groups in England.³⁷ It is uncertain whether there may be more under reporting and under diagnosis in some ethnic groups than others.

Socioeconomic status

A study from two decades ago found no relationship between socioeconomic status (income or education) and migraine in England.³⁸

Another UK study examined the impact of sociodemographic and psychological factors in childhood and adulthood on the prevalence of migraine in adulthood. Data were drawn from a group of 5,799 people followed from birth over time. People were more likely to be living with migraine as adults if they were women, were diagnosed with migraine in childhood and had parents with a higher socioeconomic status.³⁹

Characteristics of migraine

Little UK research has been published about the number of people with different types of migraine or how many people experience various types of symptoms.

Some studies have explored the symptoms that children experience. Studies in the UK found that at least two out of three children and adolescents living with migraine have symptoms before the start of headache pain or aura (premonitory symptoms). These may include fatigue, mood change and neck stiffness. Such symptoms were discernable in children as young as 18 months old.⁴⁰ It may help to ensure early and effective treatment for children if parents and teachers are able to identify these symptoms.⁴¹

Another study found that children with migraine may experience hallucinations and illusions, including illusions of size, time, colour, body shape, movement and visual and auditory hallucination. The researchers concluded that these symptoms are common and may go unrecognised, leading to diagnostic issues if illusions are noticed before migraine headaches begin to occur. This was a small study in one part of the UK and did not set out to estimate prevalence.⁴²

Abdominal migraine is a form of migraine seen mainly in children. It consists mainly of abdominal pain, nausea and vomiting. In Scotland, children with abdominal migraine were monitored over time and compared with children who did not have abdominal pain in childhood, matched by age and gender. At later follow up, the researchers found that 70% of children with abdominal migraine were current (52%) or previous (18%) migraine headache sufferers compared to 20% of the comparison group. Abdominal migraine resolved in 61% of cases, but could be an important predictor of migraine headaches in later years.⁴³

A study in England followed up 27 family members over an eight year period to examine migraine limb pain in four generations. The researchers suggested that limb pain should be included as a childhood syndrome linked to migraine and recognised as part of the migraine spectrum in adults.⁴⁴

Whilst some UK research has commented on the symptoms of migraine in adults, most studies do not seek to quantify how many adults have different types of migraine.

One study conducted two decades ago looked at the records of people who attended a specialist headache clinic in England. One third of those seen over a three year period were diagnosed with migraine. Prior to the clinic visit, most people living with migraine used simple pain killers for pain relief and did not use preventive medication. The researchers concluded that the management of migraine in primary care may be suboptimal and that educational initiatives were needed.⁴⁵

Other health conditions

Many people living with migraine in the UK may live with other long term conditions.^{46,47}

For instance, a study examined the link between migraine and dementia in 7,454 people in the UK. Data from people who received a migraine diagnosis at 67 general practices between January 1997 and December 2016 were compared with a matched group of people without migraine diagnoses. For women, but not for men, those with a diagnosis of migraine were more likely than others to be diagnosed with dementia within ten years of their migraine diagnosis. 6% of women with migraine were diagnosed with dementia within ten years compared to 4% of women without migraine. This may seem like a small difference, but it was statistically significant which means it is unlikely to have occurred by chance.⁴⁸

Another study examined the characteristics of 1,488 people with bipolar disorder, with and without migraine. The researchers found that the group with migraine were more likely to be female, have panic attacks and also have rapid cycling bipolar disorder.⁴⁹

Other researchers explored the link between Meniere's disease, migraine and allergy. Meniere's disease is disorder of the inner ear that can lead to dizzy spells and hearing loss. Migraine and allergy were more common in people with Meniere's disease compared with a comparison group matched by age and gender. The prevalence of allergy was significantly higher in people who had both Meniere's disease and migraine compared to those with Meniere's disease alone. This authors suggested that migraine and Meniere's disease may be linked by an immunological factor.⁵⁰

International research

Research about the characteristics of people living with migraine in other countries was also sparse, but there was more information known about people's ethnic groups and socioeconomic status. Other countries were not the focus of this review so this section provides only a small number of examples to give a flavour of the research available elsewhere.

Ethnic group

In the USA it has been suggested that significant disparities exist in migraine prevalence, migraine related pain and disability, access to care and quality of care. It is reported that African Americans, Hispanics, people living in poverty, the unemployed and those exposed to stressful and traumatic events may be more affected by migraine. These groups are also underrepresented in migraine research. Where studies with these groups are undertaken, they may examine differences between ethnic groups or other factors alone, rather than considering multiple mechanisms of disparity.⁵¹

A review of national population surveys in the USA found that the prevalence of migraine and severe headache was highest in Native Americans, followed by White people, then Black and Hispanic people, and lowest in people of Asian descent.⁵²

Another compilation of nine large, nationally representative studies conducted in the USA between 1989 and 2014 found the same result. Women were more likely to live with migraine, regardless of ethnic group. Chronic migraine (at least 15 days per month), was highest in Hispanic women (2% compared with 1% for White females) and lowest in White males (0.5%). This study suggested that there were important differences within broad ethnic groupings, such as between different Asian ethnicities. The researchers argued that combined prevalence estimates for broad ethnic groups such as 'Asian' may conceal meaningful differences in subgroups such as those from the Philippines versus Vietnam.⁵³

Socioeconomic status

A review of national surveys in the USA found that migraine was most commonly reported in people who are unemployed or on low incomes.⁵⁴

Urban versus rural areas

A review that combined data from 6.2 million people around the world found that the proportion of people living with migraine was about 11% in urban residents and 8% in rural residents.⁵⁵ This was a statistically significant difference, which meant it is unlikely to have happened by chance.

Characteristics of migraine

Research from other countries has explored on the proportion of people with migraine who have various symptoms. Researchers state that there are changes in migraine symptoms over time, with shorter duration of attacks⁵⁶ and different symptoms such as vomiting, abdominal pain or vertigo in childhood and more headache on both sides of the head in the elderly.⁵⁷

Other conditions

A number of international studies have explored whether people living with migraine have other health conditions or whether migraine is likely to be experienced by people with other conditions. Reviews of research and individual studies have suggested that migraine may be more common amongst people who have:

- anxiety and depression^{58,59}
- asthma⁶⁰
- bipolar disorder⁶¹
- chronic pain⁶²
- epilepsy⁶³
- hearing loss⁶⁴
- hole in the heart (patent foramen ovale)⁶⁵
- Meniere's disease (inner ear disorder)⁶⁶
- musculoskeletal pain^{67,68}
- neurofibromatosis in children (tumours on nerve tissue)⁶⁹
- poor self rated health⁷⁰
- pregnancy complications, particularly vascular events⁷¹
- primary open angle glaucoma⁷²
- psychological distress⁷³
- psychosomatic symptoms⁷⁴
- restless legs syndrome⁷⁵
- sarcoidosis (lumps and swollen tissue)⁷⁶
- sleep problems^{77,78}
- stroke and transient ischemic attack, particularly associated with migraine with aura^{79,80}
- suicidal thoughts and suicide attempts⁸¹
- vascular disorders, particularly in women⁸²

This is not an exhaustive list.

As an example of the type of research available, a compilation of data from 10 studies with more than 1.5 million people found a link between migraine and epilepsy. People with migraine were 79% more likely to have epilepsy compared to those without migraine. People with epilepsy were 52% more likely to have migraine than those without epilepsy. The results varied depending on the methods used to determine whether people were living with migraine or epilepsy.⁸³ This is not necessarily a causal relationship. The reasons are unclear.

Summary

What we know

Migraine is the seventh most disabling health condition across the world.⁸⁴ The World Health Organization classifies migraine as one of the most disabling conditions, comparable in impact to psychosis, dementia and quadriplegia.⁸⁵ However relatively little appears to have been published about the characteristics of people living with migraine in the UK.

Over the past two decades there have only been two large published research studies seeking to examine the characteristics of people with migraine throughout the UK population. Other smaller studies are also available about particular subgroups or topic areas.

Based on the information available:

- Around one in five adults in the UK may be living with migraine or migraine like symptoms (23%). This is about 10 million adults.
- More women in the UK live with migraine than men (around 24% compared to 12%).
- Those in their 20s, 30s and 40s are most likely to be affected, but migraine also affects children and older people. About one in ten children may live with migraine (9% of those aged 5 to 14 years).
- There is very limited information about where in the UK people with migraine live, what work they do, their ethnic group or socioeconomic status.
- People living with migraine commonly have other long term mental and physical health conditions, meaning that that may have an even greater burden to cope with.

Implications

Box 1 provides The Migraine Trust's initial reflections about the implications of this review.

Migraine in the UK is common and debilitating. It is the third leading cause of ill health and disability here. However, based on the lack of published research, it appears that migraine is relatively neglected amongst researchers and research funders in the UK.⁸⁶ A lack of information about migraine symptoms, causes and care may lead to migraine being under diagnosed and under treated.⁸⁷

International research suggests that historically disadvantaged population groups are more likely to live with migraine, including women, those on low incomes and some minority ethnic groups. In the UK, women are more likely to be diagnosed with migraine than men. However there is little research about whether the UK has any ethnic or socioeconomic inequities in the migraine population or in migraine care.⁸⁸

There is a lack of consistency in how different studies define migraine, which makes it difficult to make comparisons between countries, track changes over time or know whether trends elsewhere could also apply to the UK.⁸⁹

There is some evidence that people in the UK are not gaining the best care available to them. A survey of 9,770 people living with migraine found that most did not consult general practitioners due to thinking that GPs would not know about their condition or have empathy, because they did not think there would be appropriate care available or because they previously had a poor experience of care.⁹⁰ Knowing more about the migraine population would help to educate healthcare professionals, researchers and health and care systems about the scale of the issue and the support needed.

A targeted response is required to address the full impact of migraine. A series of workshops and interviews with people affected by migraine conducted by The Migraine Trust in 2019 found that people's key priorities included improving diagnosis, improving care and treatment and raising awareness and understanding of the wider impact that migraine has across society. Improving the quality and quantity of information available about people living with migraine in the UK may be a key part of these solutions.⁹¹

Box 1: The Migraine Trust's first thoughts about what this review tells us

We've heard from migraine researchers and other experts that we need to know a whole lot more about the migraine population if we're going to make a more successful case for the kind of change people affected by migraine say they most want and need.

We undertook this review to help us understand what the current research evidence is telling us about the UK's migraine population and to help us start the process of identifying the most pressing evidence gaps that we think need to be filled. After reading the review's findings, we have three top takeaways.

Firstly, despite the extremely high prevalence of migraine, there is a lack of even basic information about the characteristics of the people who live with the condition. This holds true both in the UK and internationally, although it is important to note that research from the UK is particularly lacking. For example, while anecdotally we hear that migraine disproportionately impacts people working in the NHS or serving in the military, there have been no published studies about which industries in the UK people with migraine are most likely to be working in.

Similarly, there has been very little research into the socioeconomic status and ethnic groups of people living with migraine in the UK. This makes it challenging to plan effective support or outreach strategies and to describe the impact that migraine has on individuals, communities, sectors and wider society.

Secondly, the review's findings highlight some of the key areas that we think the research community in the UK could look to tackle in the first instance. For example, the international literature shows some evidence that migraine is more commonly reported in people who are unemployed, on low incomes and who live in urban areas. We think these are critical areas for the UK research community to explore so we can better understand our patient population and gauge whether there are any inequalities in terms of access to care and support. The review also points to several others areas ripe for future exploration.

The review highlights what we definitely do know about the 10 million people with migraine living in the UK. In the UK people with migraine are more likely to be female, aged in their 20s, 30s or 40s and living with at least one other long term health condition.

We'll be using the findings from this review, and the evidence gaps that it has revealed, to try to build a clearer picture of the UK's migraine community. Please let us know what you think the review is saying by emailing policy@migrainetrust.org.

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