

nielsen

MIGRAINE IMPACT REPORT

Executive Summary

January 2018

Lilly

AGENDA

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KEY RESEARCH QUESTIONS

1

What is the true impact that migraine has on the personal and professional lives of people diagnosed with migraine?

2

What are the disconnects between the public's perception of migraine impact on people's lives, jobs, families, etc., and what people diagnosed with migraine actually experience?

METHODOLOGY & SAMPLE



Methodology

15-minute, online, quantitative opinion survey conducted by Nielsen on behalf of Eli Lilly and Company in May 2017



Recruitment

Respondents were recruited via email invitation from online panels, according to breakout shown below.

	People diagnosed with migraine	Knows someone with migraine	Community (Does not know someone with migraine)
Sample size	518	200	300
Qualification criteria	<ul style="list-style-type: none"> Diagnosed with migraine by an HCP (self-reported) Number of migraines per month, with sub-quotas for: 4+, 4-8, 9-14, 15+ 	<ul style="list-style-type: none"> Knows someone with migraine Either a close relationship (spouse, child, roommate, other family member) or is a friend or colleague who has seen the impact of migraine Has not experienced undiagnosed migraine 	<ul style="list-style-type: none"> Does not fall into either group Has not experienced undiagnosed migraine

KEY FINDINGS

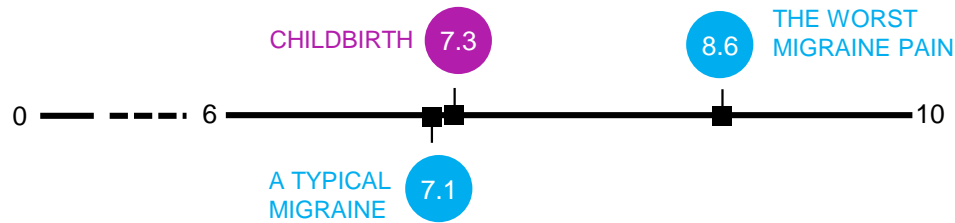
SUMMARY OF KEY FINDINGS

- People who do not have migraine often underestimate the pain and average duration of migraine
- Migraine adds stress and may result in less time with family
- Migraine may impact a person's career potential
- Most respondents diagnosed with migraine agreed they wish they could do more to manage their disease

**PEOPLE WHO DO NOT HAVE
MIGRAINE OFTEN
UNDERESTIMATE THE PAIN AND
AVERAGE DURATION OF MIGRAINE**

NOTABLY, THE WORST MIGRAINE PAIN RANKED HIGHER THAN THAT OF CHILDBIRTH AMONG THOSE SURVEYED WHO HAD EXPERIENCED BOTH

Among women diagnosed with migraine who have experienced childbirth (n=244)

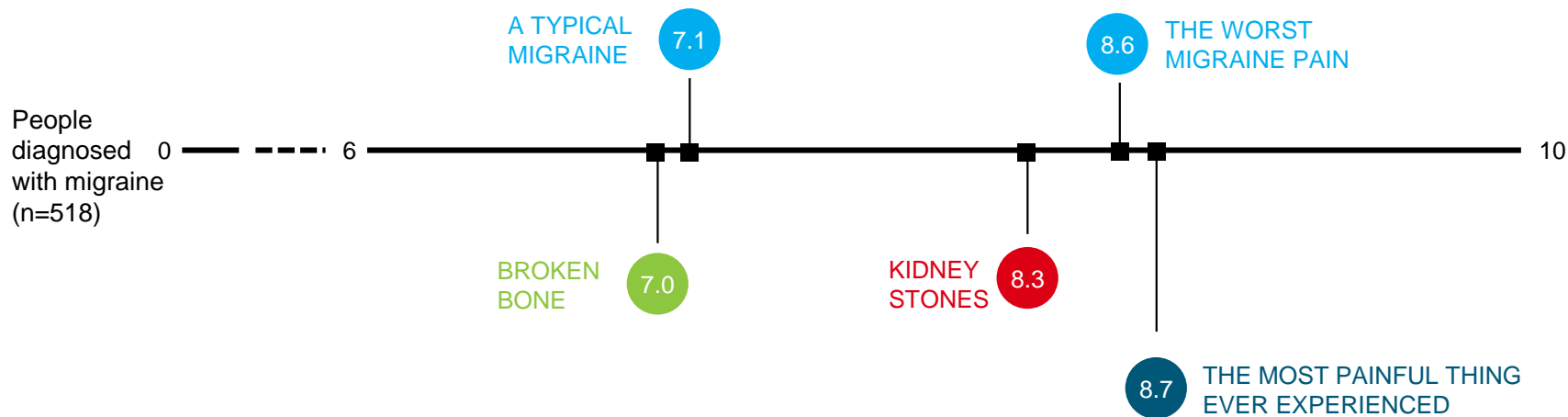


Base: Experienced both childbirth and migraine (n=244)

Q11n. For each experience below, please select a point on the pain scale to indicate the level of pain.

RESPONDENTS DIAGNOSED WITH MIGRAINE ON AVERAGE RATED THE WORST MIGRAINE PAIN SIMILARLY TO THAT OF THE “MOST PAINFUL THING I HAVE EVER EXPERIENCED”

Average Rating on a 10-Point Pain Scale

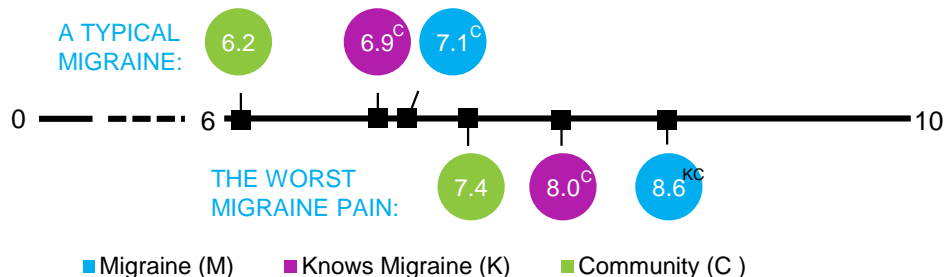


Base: Migraine (n=518)

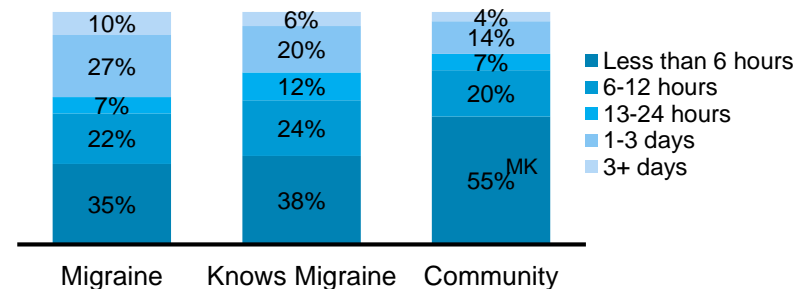
Q11n. For each experience below, please select a point on the pain scale to indicate the level of pain. For those which you have not personally experienced, please select the pain level you think people experience. (A typical migraine)

PEOPLE WHO DO NOT HAVE MIGRAINE UNDERESTIMATE THE SEVERITY OF THE DISEASE

People who do not have migraine underestimate level of pain



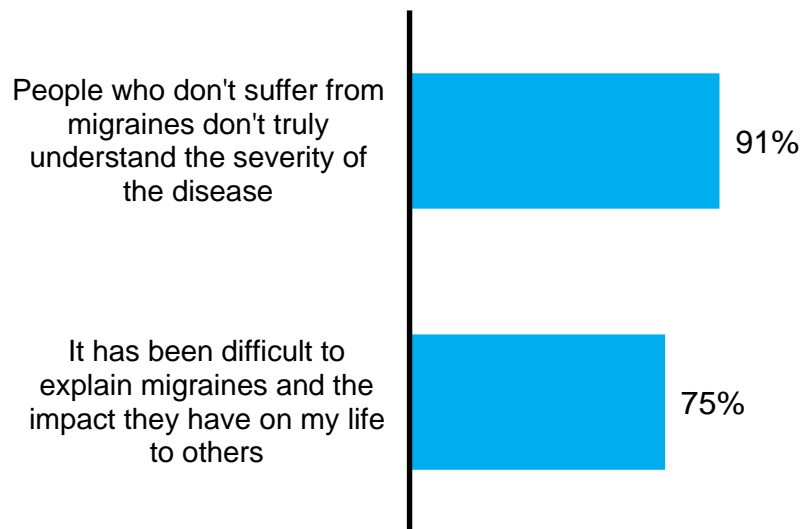
...And the average duration of a migraine



Base: Migraine (n=518), Knows Someone with Migraine (n=200), Community (n=300); Statistical testing conducted at the 95% confidence level. Superscript indicates statistical significance; Q6. How long does a migraine typically last?/ How long do you think a migraine typically lasts? Please think about **all migraine symptoms**, including anything that may come before or after head pain.; Q11n. For each experience below, please select a point on the pain scale to indicate the level of pain.

NEARLY ALL RESPONDENTS DIAGNOSED WITH MIGRAINE (91 PERCENT) AGREED THOSE WHO DO NOT SUFFER FROM MIGRAINE DO NOT UNDERSTAND THE SEVERITY OF THE DISEASE

% Agree Top 3 Box

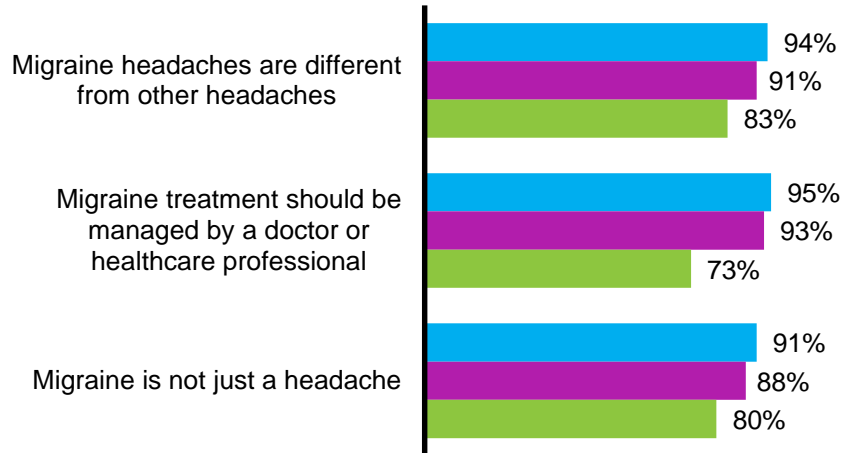


Base: Migraine (n=518); agree is top 3 box agreement on a 6 point scale

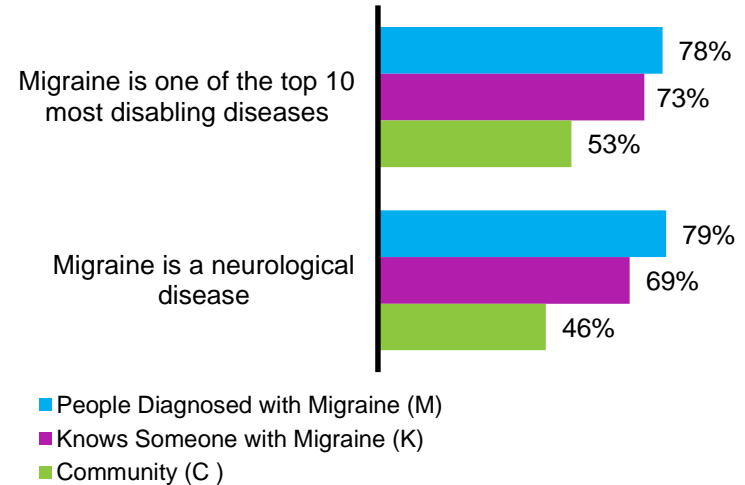
Q11./Q21. Using the scale shown below, please indicate how much you agree or disagree with the following statements. Top 3 Box on 6 point scale

ALTHOUGH PEOPLE WHO DO NOT HAVE MIGRAINE ARE AWARE THAT MIGRAINE IS NOT JUST A HEADACHE, THEY ARE LESS LIKELY TO KNOW IT'S A NEUROLOGICAL DISEASE

Most people who do not have migraine are aware that migraine is not just a headache...



But they're less likely to know the specifics.



Base: Migraine (n=518), Knows Someone with Migraine (n=200), Community (n=300); Statistical testing conducted at the 95% confidence level. Superscript indicates statistical significance.

Q3. Using the scale shown below, please indicate how much you agree or disagree with the following statements. Top 3 Box Summary.

**MIGRAINE FREQUENTLY ADDS
STRESS AND MAY RESULT IN LESS
TIME WITH FAMILY**

RESPONDENTS DIAGNOSED WITH MIGRAINE EXPERIENCED ON AVERAGE 15.4 COMPLETELY PAIN-FREE DAYS OVER PREVIOUS 30 DAYS

People diagnosed with migraine haven't been able to do what they want for 6.9 days over the previous 30 days...

of days haven't been able to do what you want



6.9 days on average

...and have had even more days with some kind of pain over the previous 30 days

of days completely pain-free

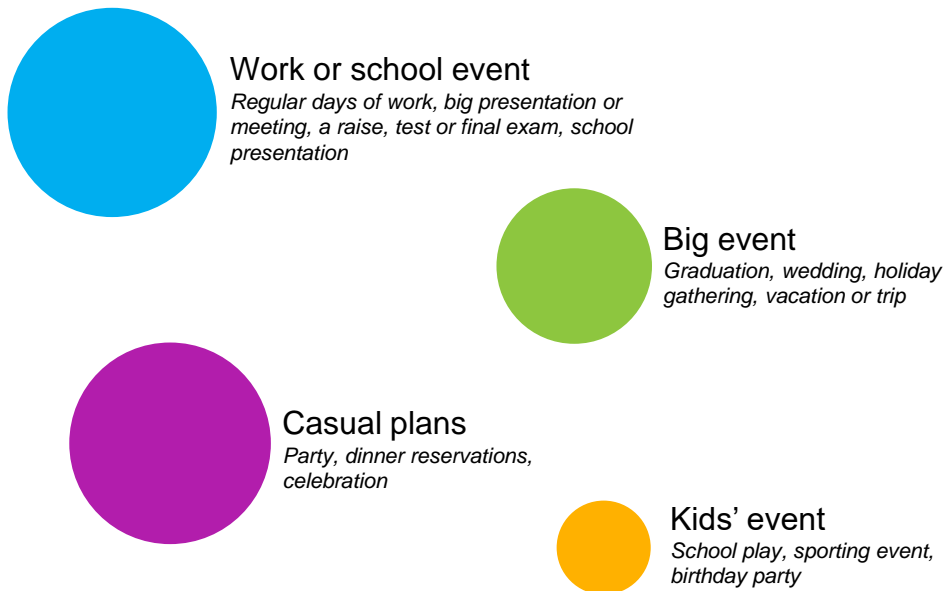


15.4 completely pain-free days on average

Base: Migraine (n=518); *MHD='migraine headache days' or days with migraine pain or symptoms in of the previous 30 days
Q17B. In the past 30 days, how many days have you not been able to do what you want because of migraines?
Q17C. In the past 30 days, how many days have you been completely pain-free?

PEOPLE DIAGNOSED WITH MIGRAINE MAY MISS IMPORTANT EVENTS

Events or Plans Missed Because of Migraine



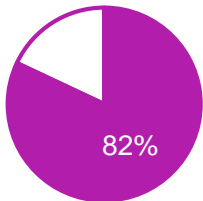
Base: Migraine (n=518); *MHD='migraine headache days' or days with migraine pain or symptoms in of the previous 30 days
Q16. Have you ever missed any of the following because of migraines? Yes Summary? Q18. In the past year, how many important events (major work events, weddings, holiday gatherings, parties, vacations/trips, kids' events, etc.) have you missed because of migraines?

82 PERCENT OF PEOPLE DIAGNOSED WITH MIGRAINE AGREED IT IS STRESSFUL TO HAVE AN UNPREDICTABLE DISEASE LIKE MIGRAINE

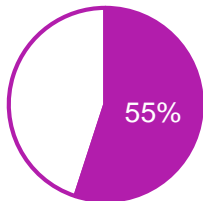
% Agree Top 3 Box

Stress from Unpredictability

It's **stressful** to have an **unpredictable** disease like migraine

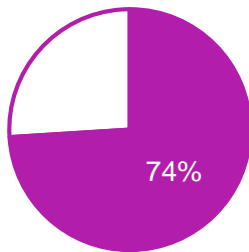


Thinking about migraines and whether I will get a migraine **adds stress to my daily life**



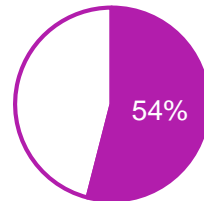
Worry about Attacks

I **worry about the effect** that migraines may have on my day, if I get one

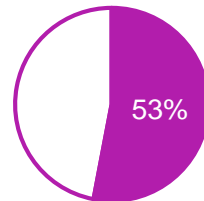


Avoiding and Managing Triggers

Trying to avoid getting a migraine **adds stress to my daily life**



Even when I don't have a migraine, **my life is affected** because I am thinking about possible triggers



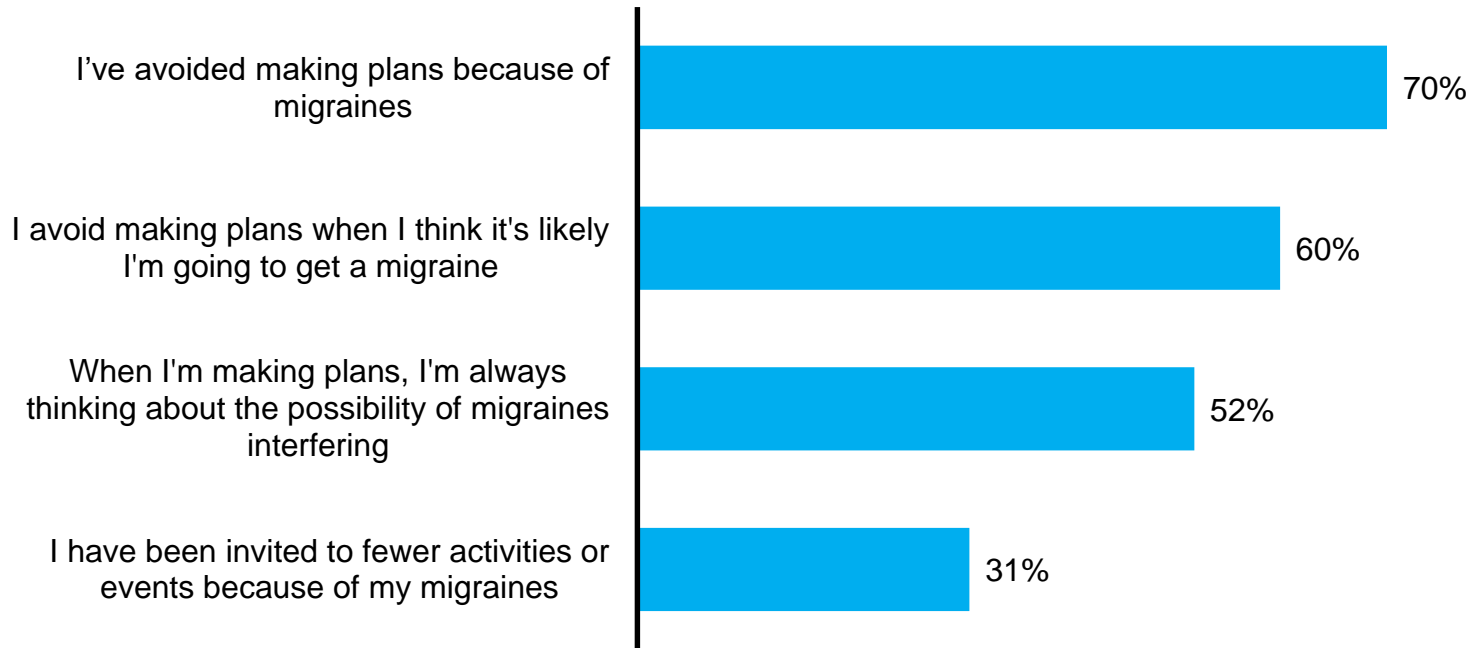
Base: Migraine (n=518)

Q23. Using the scale shown below, please indicate how much you agree or disagree with the following statements.

Agreement Scale: '(6) Strongly agree '(5) Mostly agree '(4) Somewhat agree '(3) Somewhat disagree '(2) Mostly disagree '(1) Strongly disagree

70 PERCENT OF PEOPLE DIAGNOSED WITH MIGRAINE AGREED THEY'VE AVOIDED MAKING PLANS BECAUSE OF MIGRAINE

% Agree Top 3 Box



Base: Migraine ; (n=518), agree is top 3 box on a 6 point scale

Q15. Using the scale shown below, please indicate how much you agree or disagree with the following statements.

MIGRAINE MAY RESULT IN LESS TIME WITH FAMILY

% Agree Top 3 Box

Among people diagnosed with migraine who have children under 13...

77%

Agreed they're not able to **interact with their kids** as much as they would like to because of migraines

63% of people diagnosed with migraine who have children of any age

80%

Agreed their kids have **more screen time** than they want them to when they are suffering from a migraine

53% of people diagnosed with migraine who have children of any age

79%

Agreed their migraines impact the **ability to take care** of their family

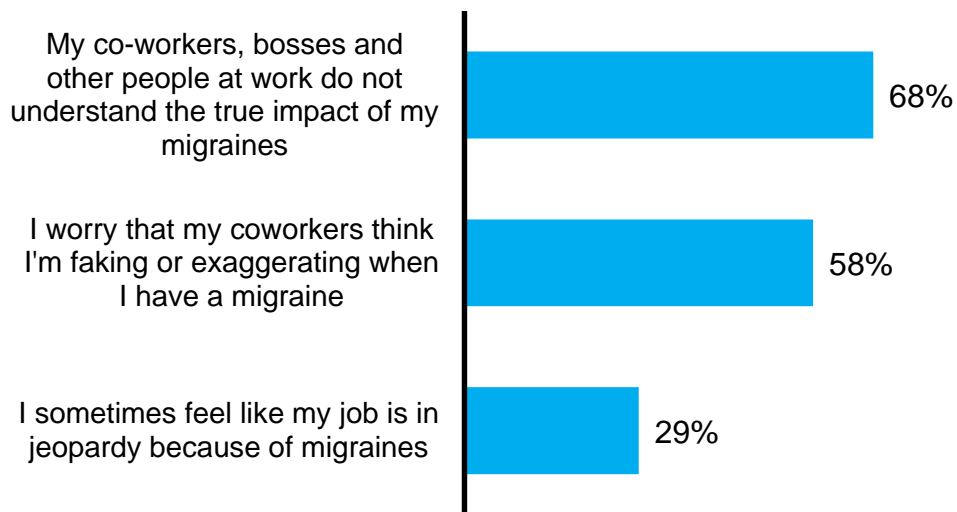
72% for all people diagnosed with migraine

Base: Migraine with children (n=334) and children under 13 (n=201) for first two statements; All People diagnosed with migraine (n=518) for third statement; Q15. Using the scale shown below, please indicate how much you agree or disagree with the following statements. Q10. Thinking about the overall impact migraines have had on your life, to what extent do you believe that migraines have negatively affected your...

MIGRAINE MAY IMPACT A PERSON'S CAREER POTENTIAL

MORE THAN HALF OF PEOPLE DIAGNOSED WITH MIGRAINE AGREED THEY TRY TO HIDE THE TRUE IMPACT OF THE DISEASE

% Agree Top 3 Box



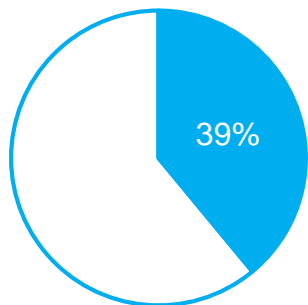
62%

Agreed they try to **hide the true impact** of their migraines from people at work or school

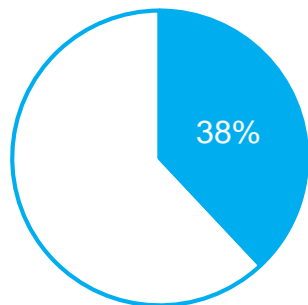
39 PERCENT OF PEOPLE DIAGNOSED WITH MIGRAINE AGREED THEY'VE MISSED OPPORTUNITIES DUE TO MIGRAINE

Among employed respondents diagnosed with migraine, seven out of 10 (68 percent) agreed they have been less productive at work due to migraine:

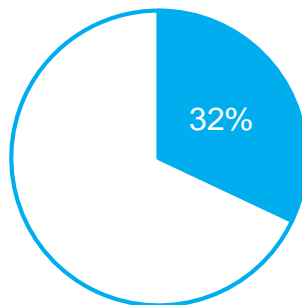
% Agree Top 3 Box



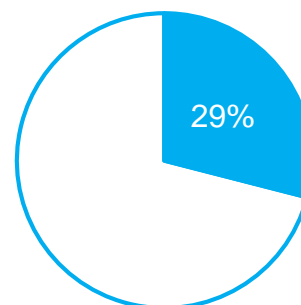
Missed out on opportunities at work (promotions, etc.)



Missed out on **additional earning potential** at work



Chose to turn down opportunities at work (promotions, etc.)



Changed jobs to minimize the likelihood of getting a migraine

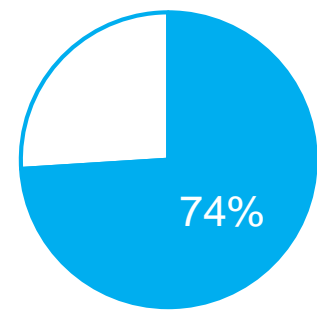
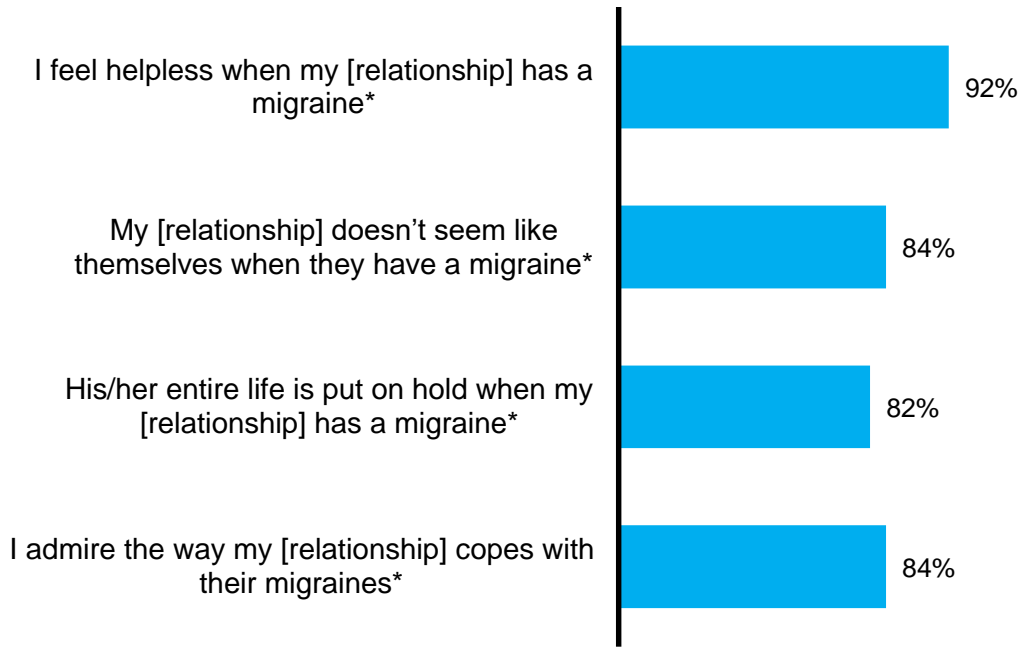
55% agreed migraines have impacted career goals

Base: People diagnosed with migraine who work (n=227); total Migraine for changed job and career goals (n=518) agree is top 3 box agreement on a 6 point scale; Q15. Using the scale shown below, please indicate how much you agree or disagree with the following statements. Q10. Thinking about the overall impact migraines have had on your life, to what extent do you believe that migraines have negatively impacted your...

**MOST RESPONDENTS DIAGNOSED
WITH MIGRAINE AGREED THEY
WISH THEY COULD DO MORE TO
MANAGE THEIR DISEASE**

NEARLY ALL THOSE SURVEYED WHO HAVE A FAMILY MEMBER WITH MIGRAINE (90 PERCENT) AGREED THEY FEEL “HELPLESS” WHEN THEIR LOVED ONE HAS A MIGRAINE

% Agree Top 3 Box: Knows Someone with Migraine



Base: Knows Someone with Migraine (n=200)

Q12. Using the scale shown below, please indicate how much you agree or disagree with the following statements.

...AND ABOUT HALF OF PEOPLE DIAGNOSED WITH MIGRAINE AGREED THEY SOMETIMES FEEL GUILTY AND BLAME THEMSELVES FOR CONTINUED MIGRAINES

% Agree Top 3 Box



48%

Agreed they sometimes **feel guilty** about their migraines because they feel like they might be able to do more to prevent them



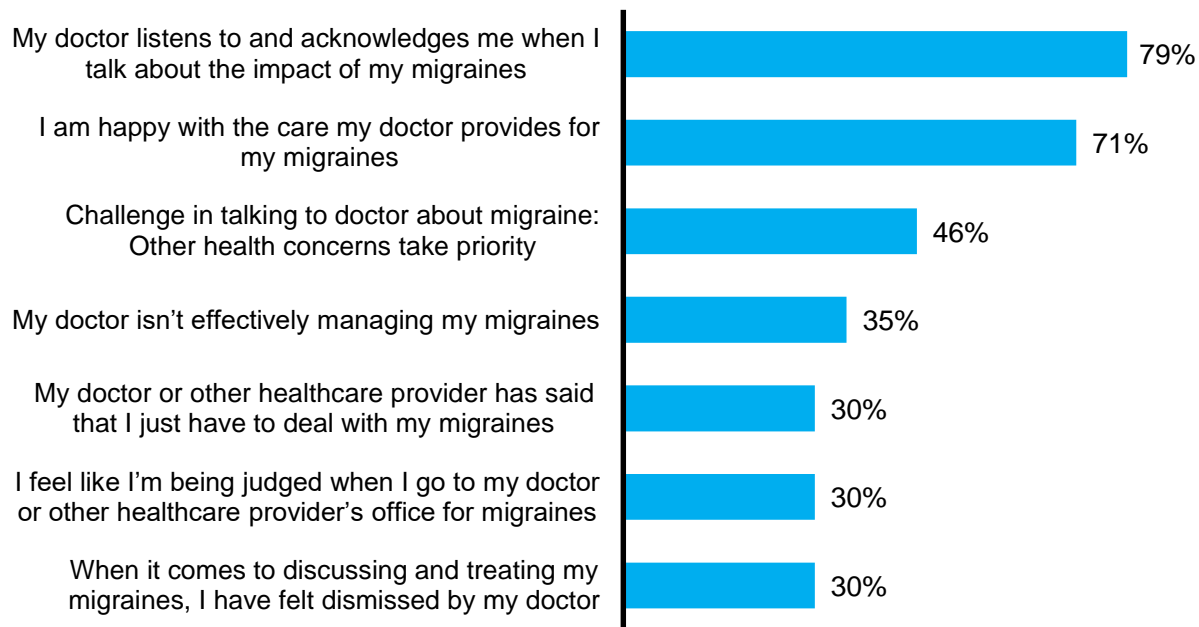
46%

Agreed they sometimes **blame** themselves for migraines

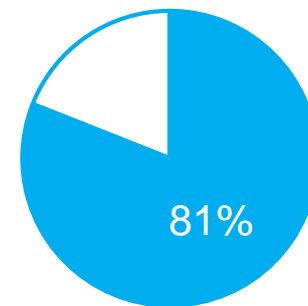
Base: Migraine (n=518); Top 3 box agreement on a 6 point scale
Q12. Using the scale shown below, please indicate how much you agree or disagree with the following statements. .

THOUGH PEOPLE DIAGNOSED WITH MIGRAINE AGREED THEY ARE MOSTLY SATISFIED WITH THEIR MEDICAL CARE, MOST AGREED THEY WISH THERE WAS MORE THEY COULD DO TO MANAGE MIGRAINE

% Agree Top 3 Box



% Agree Top 3 Box



I wish there was more I could do to manage migraine

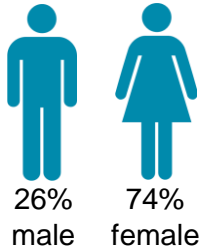
Base: Migraine (n=518); top 3 box on 6 point scale

Q21. Using the scale shown below, please indicate how much you agree or disagree with the following statements.

APPENDIX

DEMOGRAPHICS: PEOPLE DIAGNOSED WITH MIGRAINE

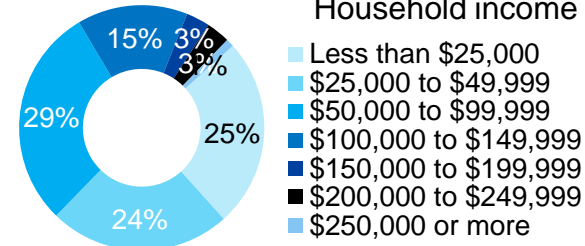
Gender



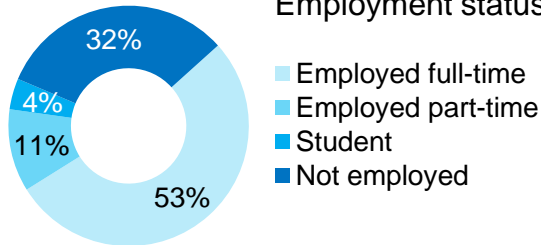
Age



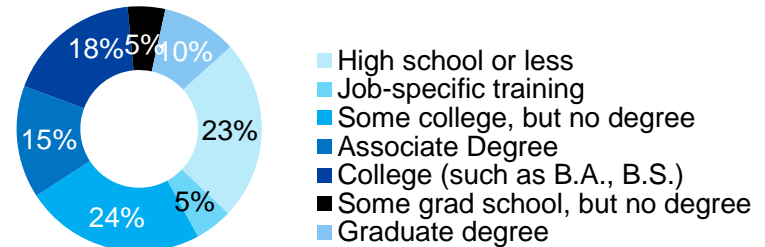
Household income



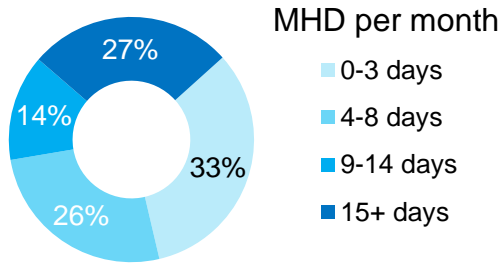
Employment status



Education



DEMOGRAPHICS: PEOPLE DIAGNOSED WITH MIGRAINE



Age diagnosed
with migraine



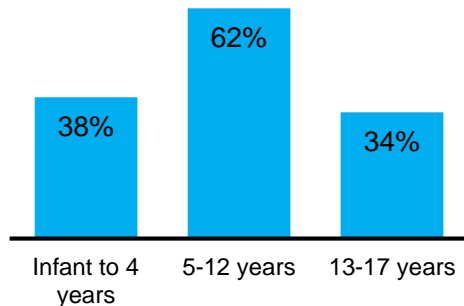
Have a significant other/
romantic partner: 76%

and

Live with that person: 87%

Have children: 65%

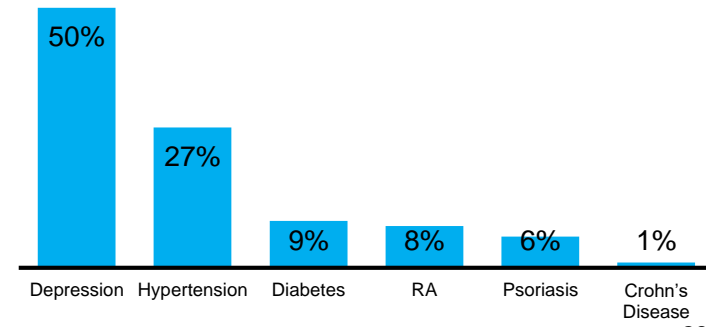
% who have children of age...



Number of days migraine
medication was taken in
previous month

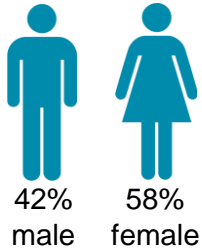


Comorbidities



DEMOGRAPHICS: KNOWS SOMEONE WITH MIGRAINE

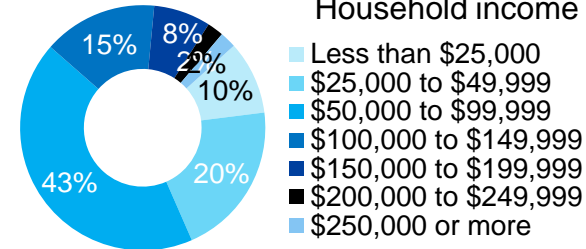
Gender



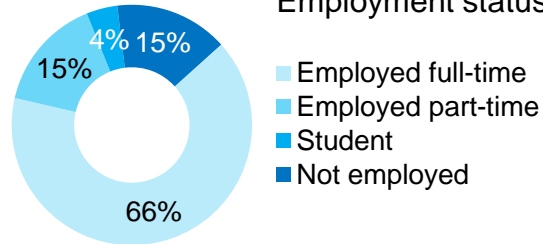
Age



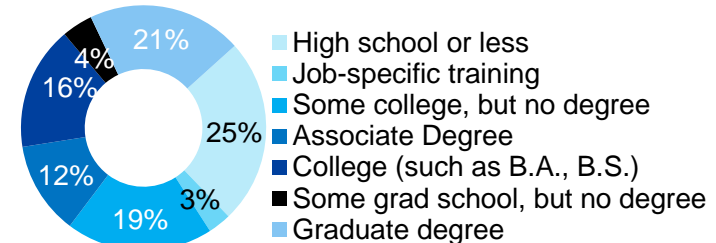
Household income



Employment status

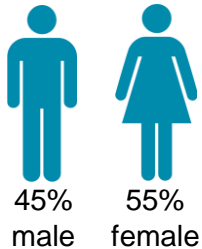


Education



DEMOGRAPHICS: COMMUNITY (DOES NOT KNOW SOMEONE WITH MIGRAINE)

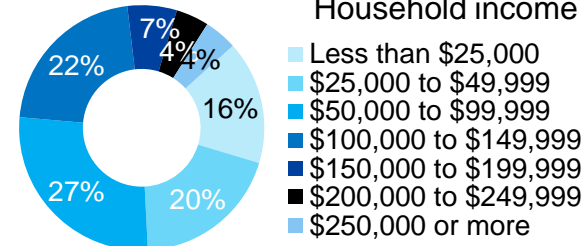
Gender



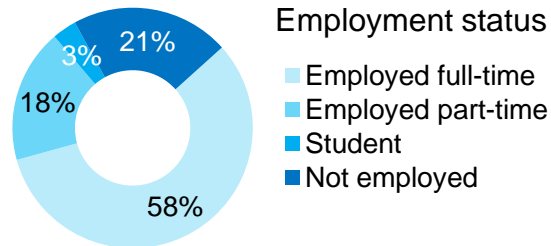
Age



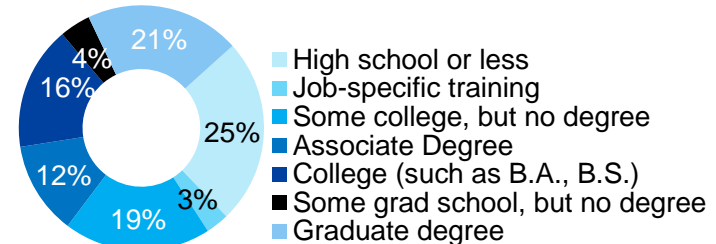
Household income



Employment status

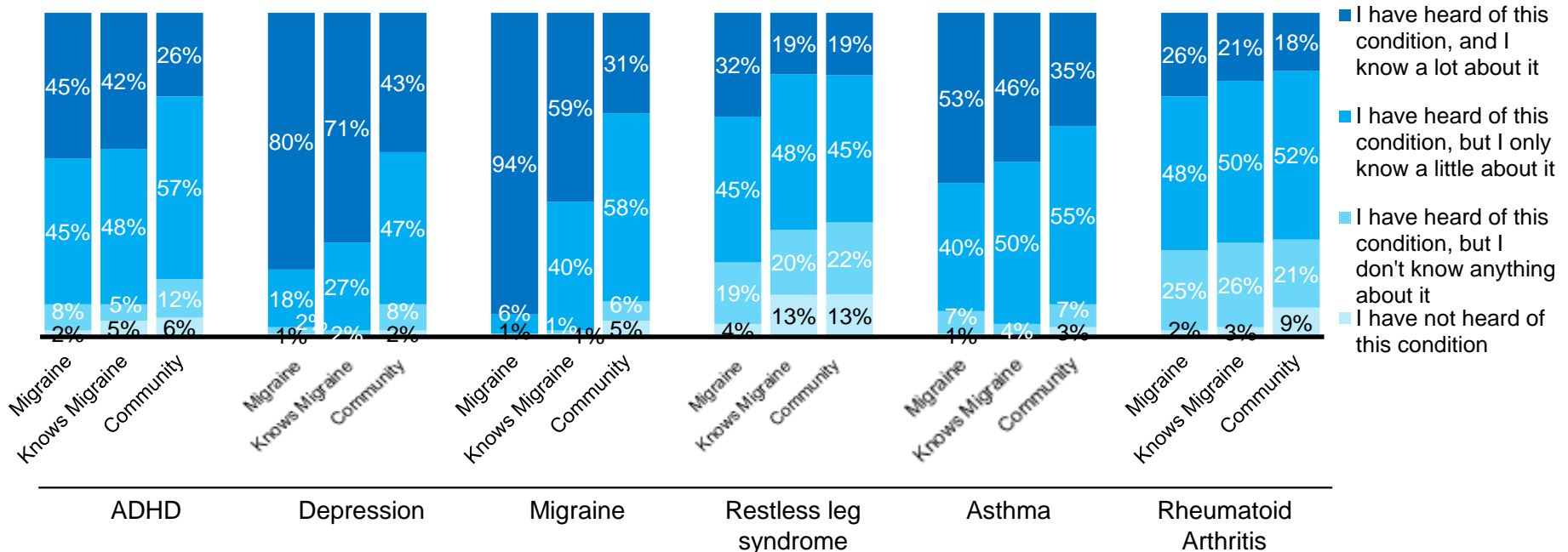


Education



CONDITION AWARENESS

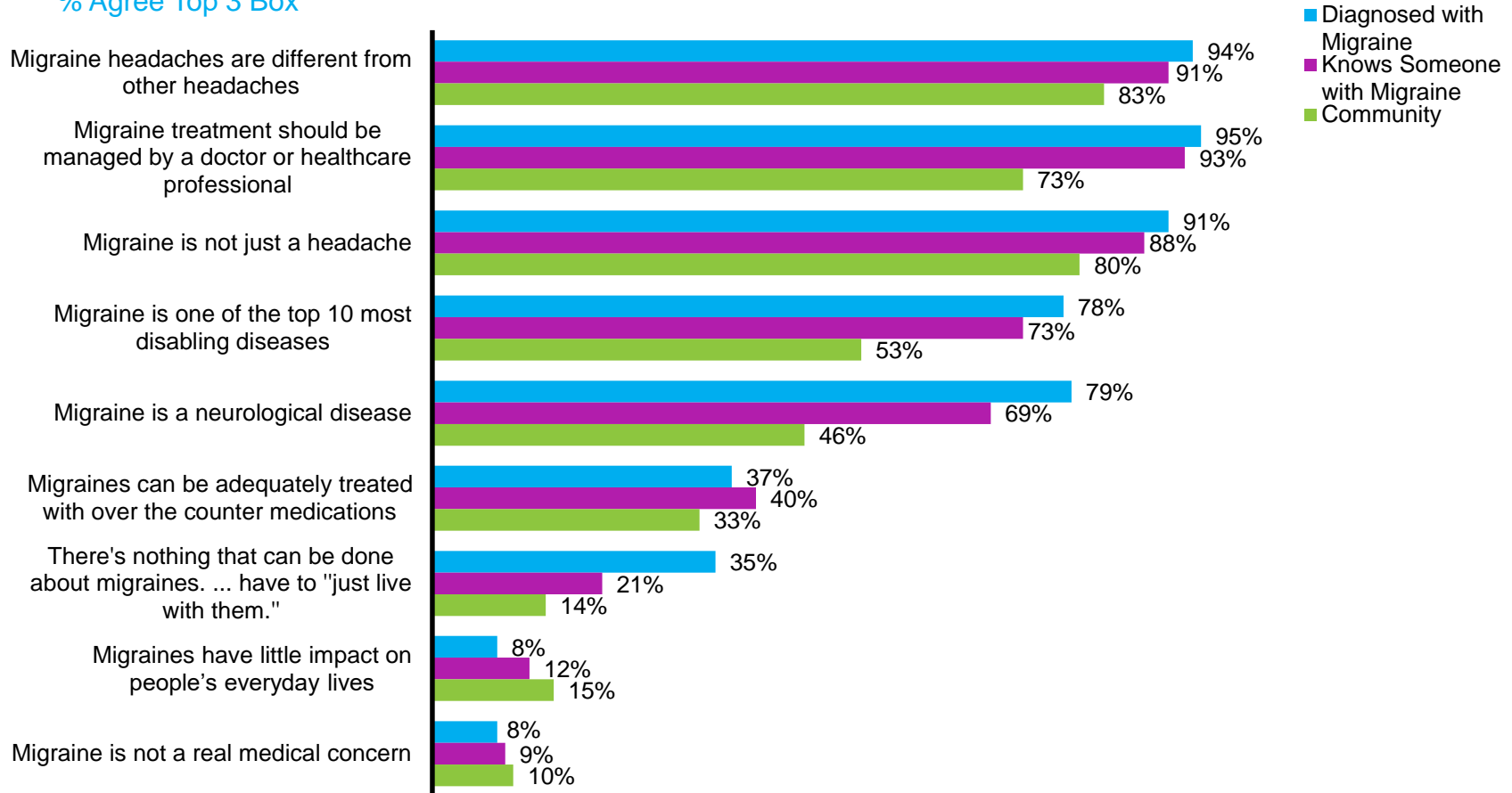
Awareness of Conditions



Base: All respondents; Migraine (n=518), Knows Someone with Migraine (n=200), Community (n=300)
 Q2a. How would you describe your level of awareness about each of the following conditions?

MIGRAINE AWARENESS

% Agree Top 3 Box

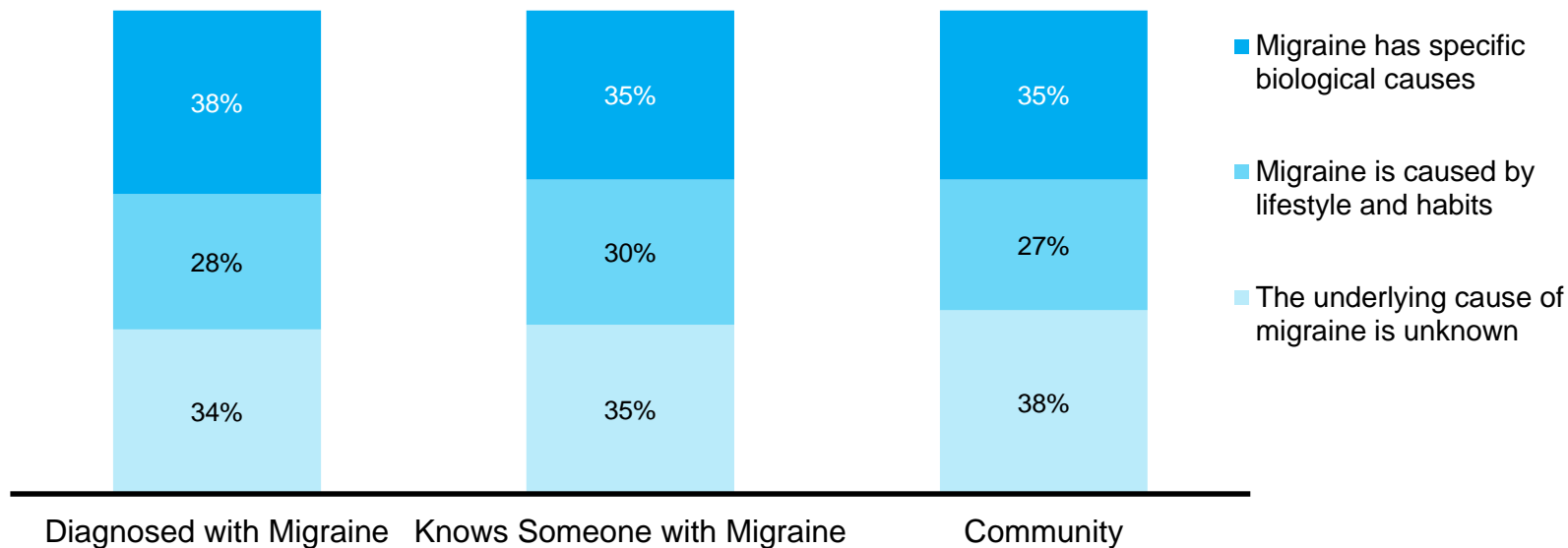


Base: All respondents; Migraine (n=518), Knows Someone with Migraine (n=200), Community (n=300)

Q3. Using the scale shown below, please indicate how much you agree or disagree with the following statements.

CAUSE OF MIGRAINE

Understanding Cause of Migraine



Base: All respondents; Diagnosed with migraine (n=518), Knows Someone with Migraine (n=200), Community (n=300)
Q3b. Which of the following best matches your understanding of the underlying cause of migraine?

MIGRAINE SYMPTOMS

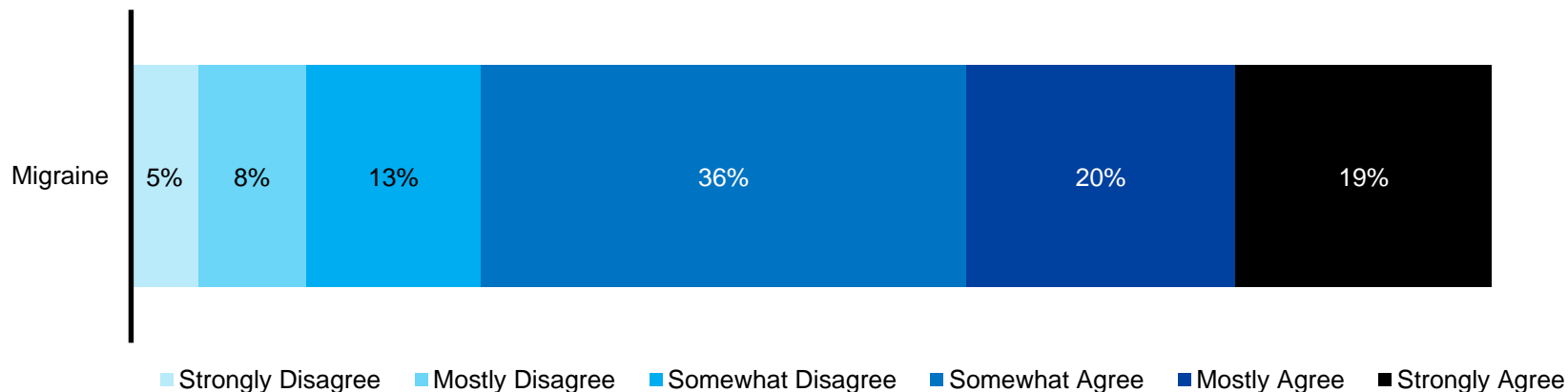
	Symptoms Experienced During Migraine	Symptoms People Think May Be Associated With Migraine	
	People Diagnosed with Migraine	Knows Someone with Migraine	Community
Head pain	98%	99%	95%
Throbbing pain	94%	91%	90%
Body or neck aches	78%	82%	63%
Nausea	80%	89%	78%
Vomiting	49%	75%	73%
Sensitivity to light	91%	97%	90%
Sensitivity to sound	85%	96%	86%
Visual effects and/or aura	79%	91%	80%
Numbness or tingling in the hands, arms, feet, legs or face	45%	52%	47%
Fatigue	86%	87%	68%
Brain fog, inability to focus	84%	85%	81%
Dizziness/ light-headedness	79%	91%	78%
Average Number of Symptoms	9.5	10.4	9.3

Base: All respondents; Migraine (n=518), Knows Someone with Migraine (n=200), Community (n=300)

Q4. Do you experience any of the following symptoms when you have a migraine? When answering, consider symptoms that you may only have some of the time./Please indicate which of the following symptoms you think may be associated with a migraine.?

SEVERITY OF SYMPTOMS

Agreement with “Sometimes, other migraine symptoms (like nausea/vomiting, sensitivity to light/sound, visual effects/aura, or numbness and tingling) can be worse than the head pain”

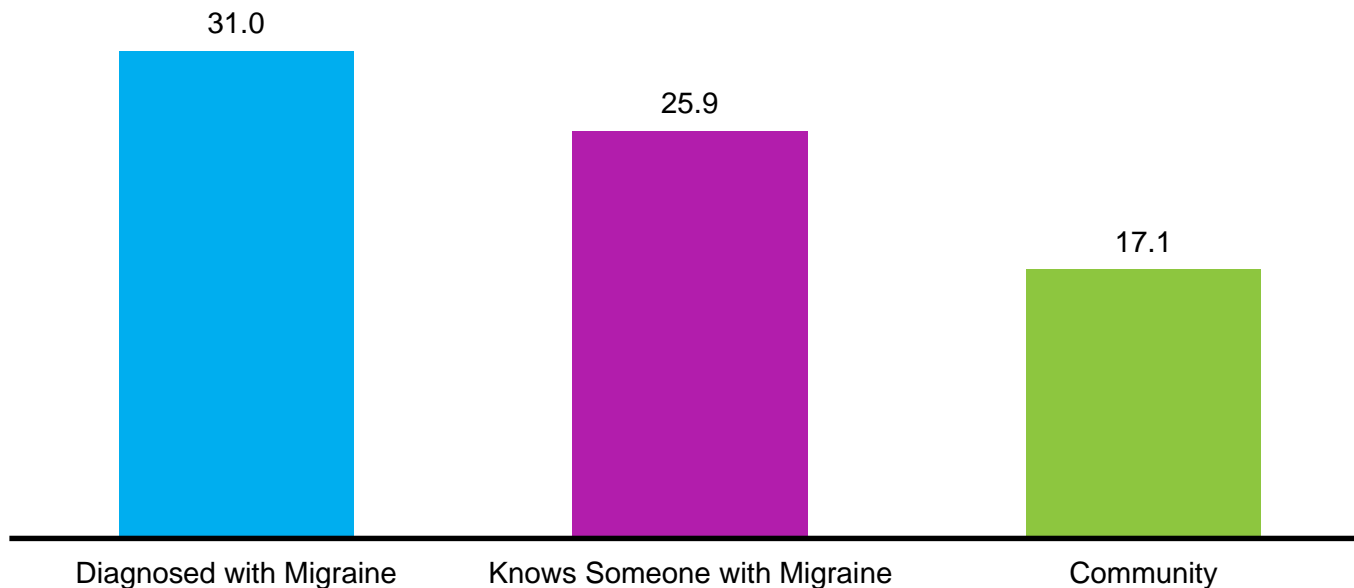


Base: Migraine (n=518)

Q5. Using the scale shown below, please indicate how much you agree or disagree with the following statements.

DURATION OF MIGRAINE

Duration of a Typical Migraine, in Hours

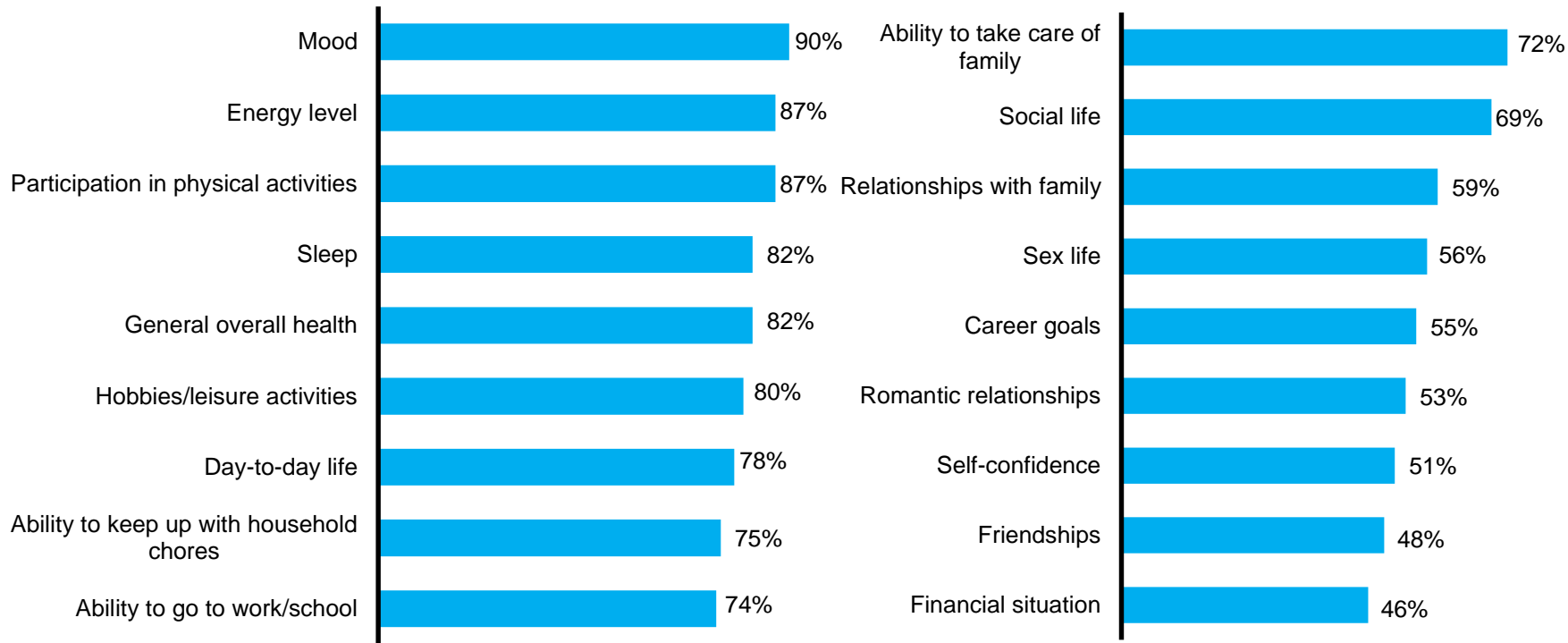


Base: All respondents; Diagnosed with Migraine (n=518), Knows Someone with Migraine (n=200), Community (n=300)

Q6. How long does a migraine typically last? / How long do you think a migraine typically lasts? Please think about all migraine symptoms, including anything that may come before or after head pain.

IMPACT ON...

% Agree Top 3 Box: Knows Someone with Migraine

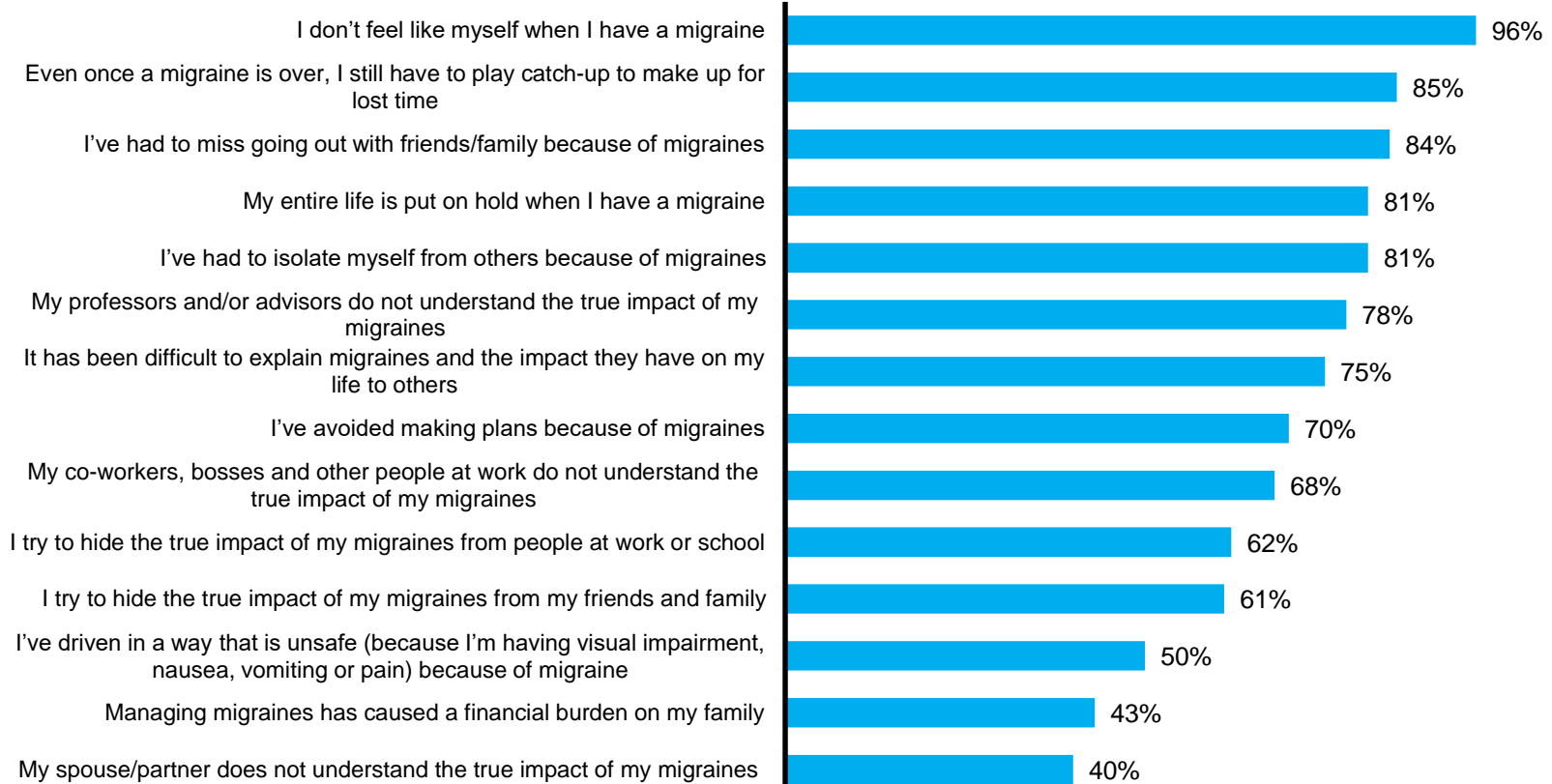


Base: All respondents; Migraine (n=518), Knows Someone with Migraine (n=200), Community (n=300)

Q10. Thinking about the overall impact migraines have had on your / ...'s life, on peoples' lives, to what extent do you believe that migraines have negatively affected your / ...'s... / negatively affect sufferer's....

AGREEMENT STATEMENTS: PEOPLE DIAGNOSED WITH MIGRAINE

% Agree Top 3 Box: People Diagnosed with Migraine

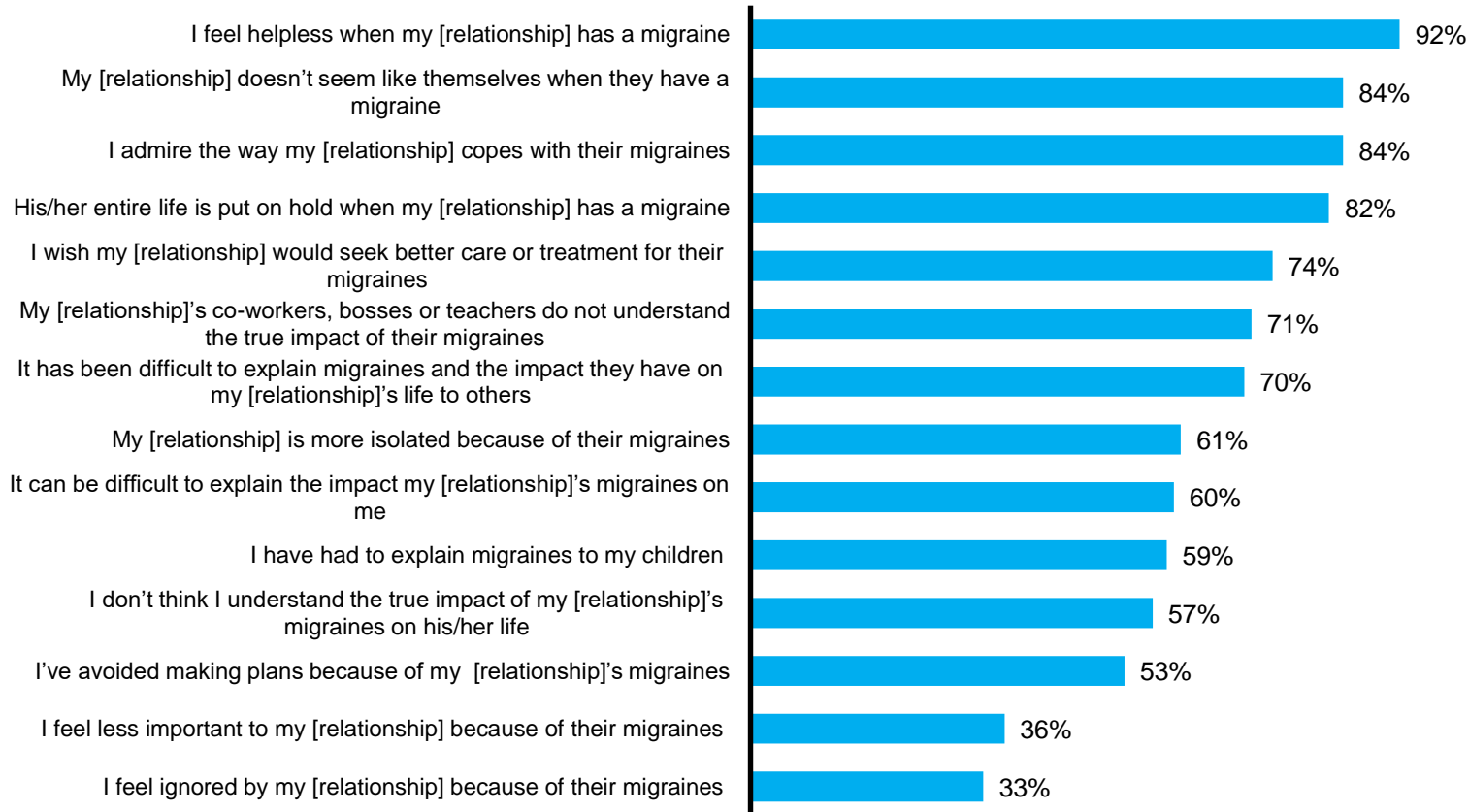


Base: Migraine (Base varies)

Q11. Using the scale shown below, please indicate how much you agree or disagree with the following statements.

AGREEMENT STATEMENTS: KNOWS SOMEONE WITH MIGRAINE ⁿ

% Agree Top 3 Box: Knows Someone with Migraine

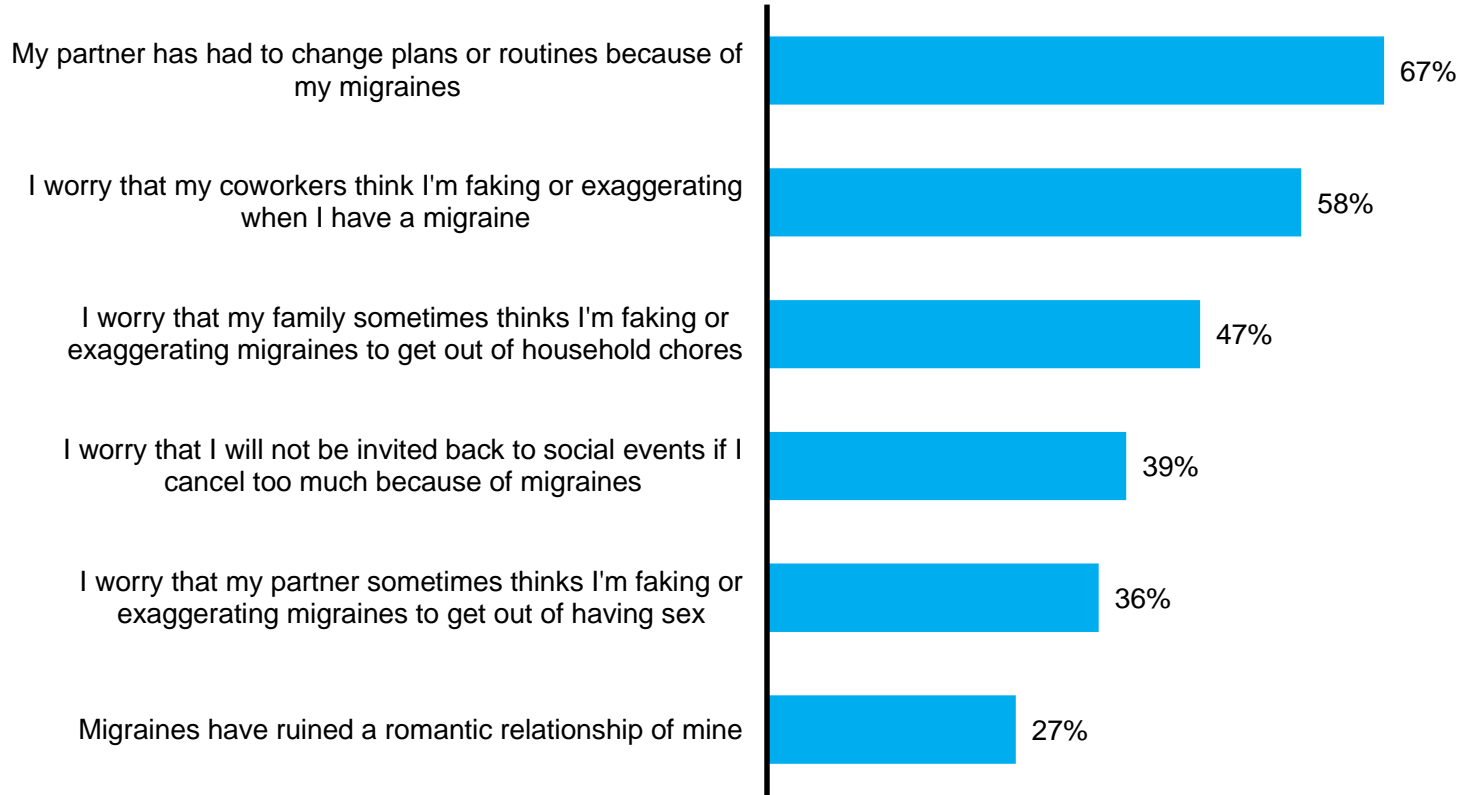


Base: Knows Someone with Migraine (Base Varies)

Q12. Using the scale shown below, please indicate how much you agree or disagree with the following statements.

AGREEMENT STATEMENTS: PEOPLE DIAGNOSED WITH MIGRAINE n

% Agree Top 3 Box: People Diagnosed with Migraine

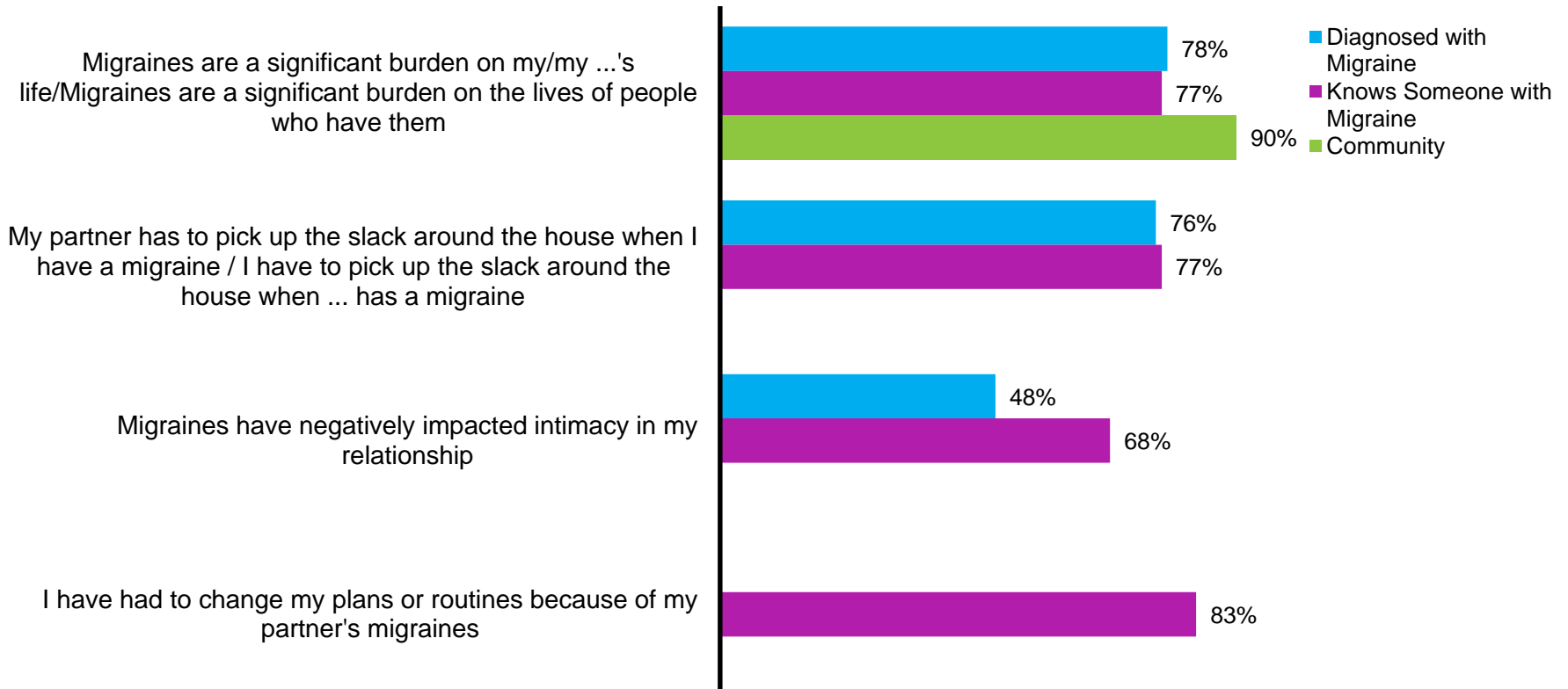


Base: All respondents; Migraine (Base Varies)

Q13. Using the scale below, please indicate how much you agree or disagree with the following statements.

AGREEMENT STATEMENTS

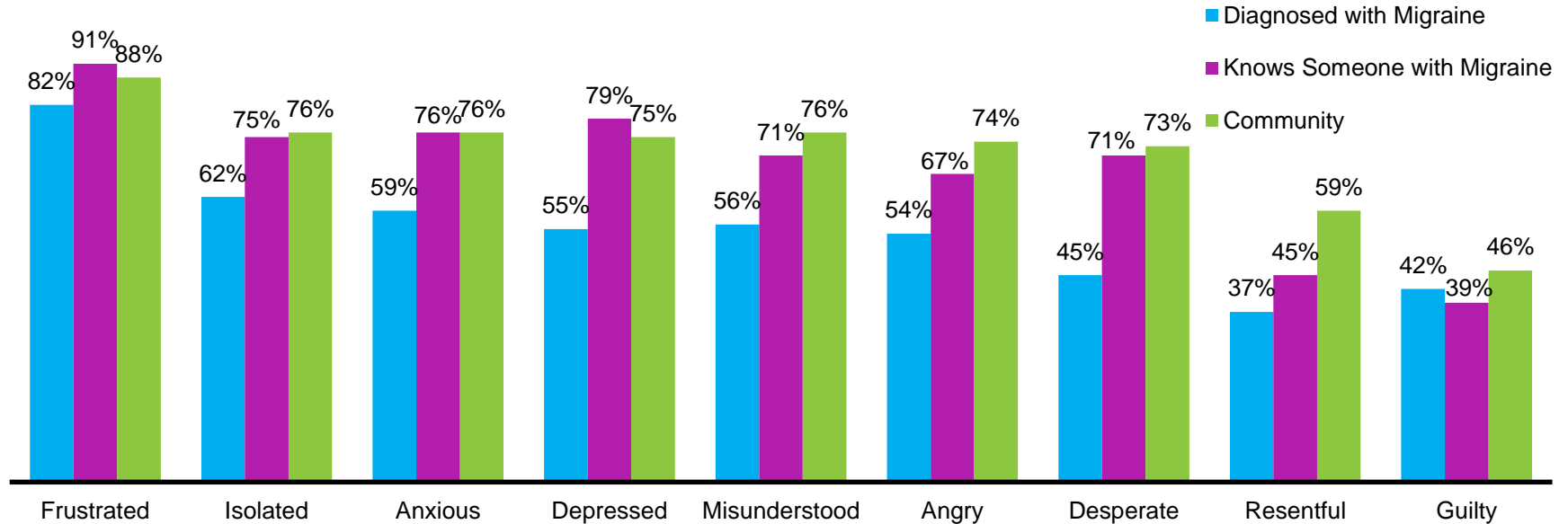
% Agree Top 3 Box



Base: All respondents; Migraine (Base Varies), Knows Someone with Migraine (Base Varies), Community (Base Varies)
Q13. Using the scale below, please indicate how much you agree or disagree with the following statements.

EMOTIONS FELT DUE TO MIGRAINE

How Often Migraines Make You/People Feel....
% Top 2 Box Always/Often

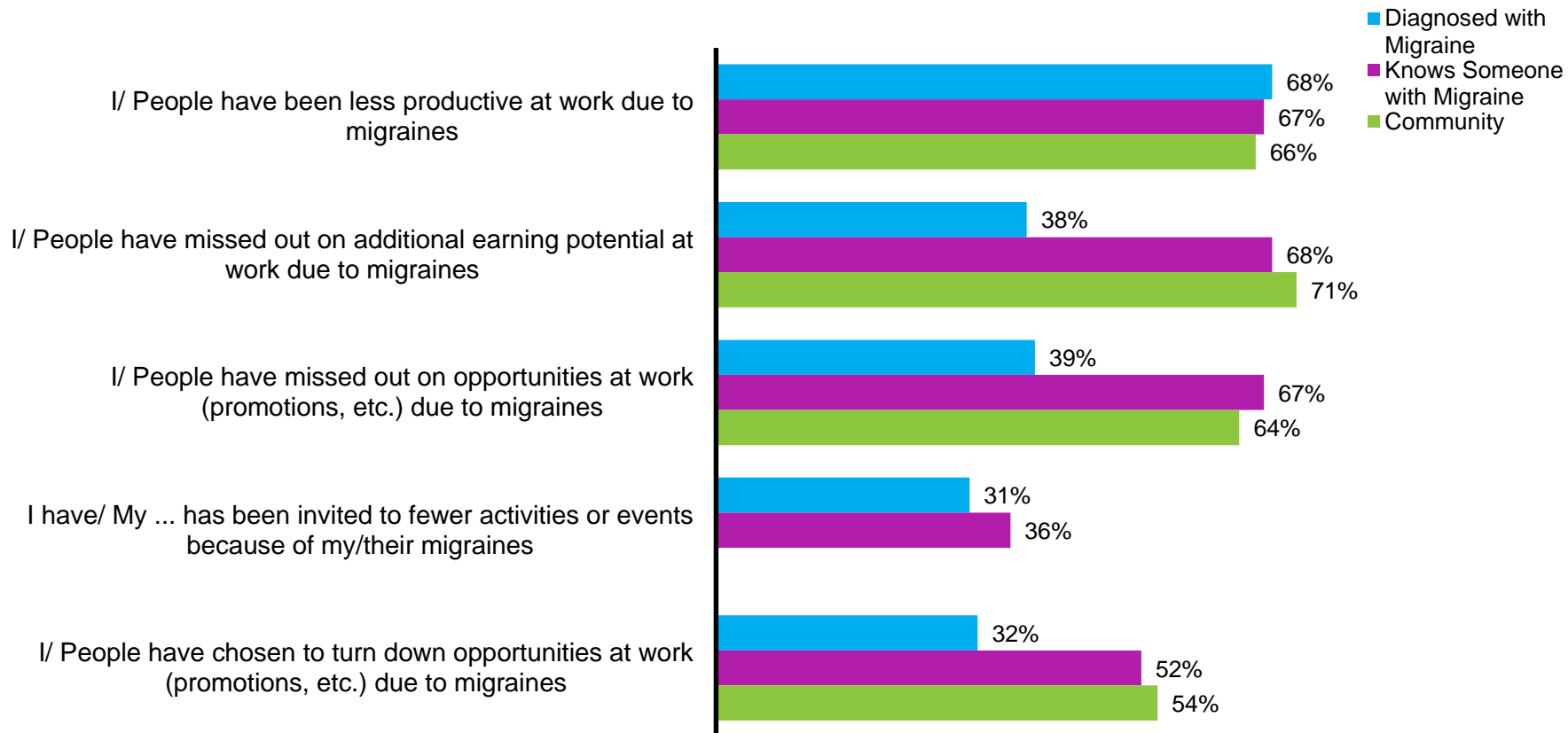


Base: All respondents; Migraine (n=518), Knows Someone with Migraine (n=200), Community (n=300)

Q14. How often do your/you think migraines make people you feel...? Please think of how migraines make you/people feel overall, not just how you feel during a migraine

AGREEMENT STATEMENTS

% Agree Top 3 Box

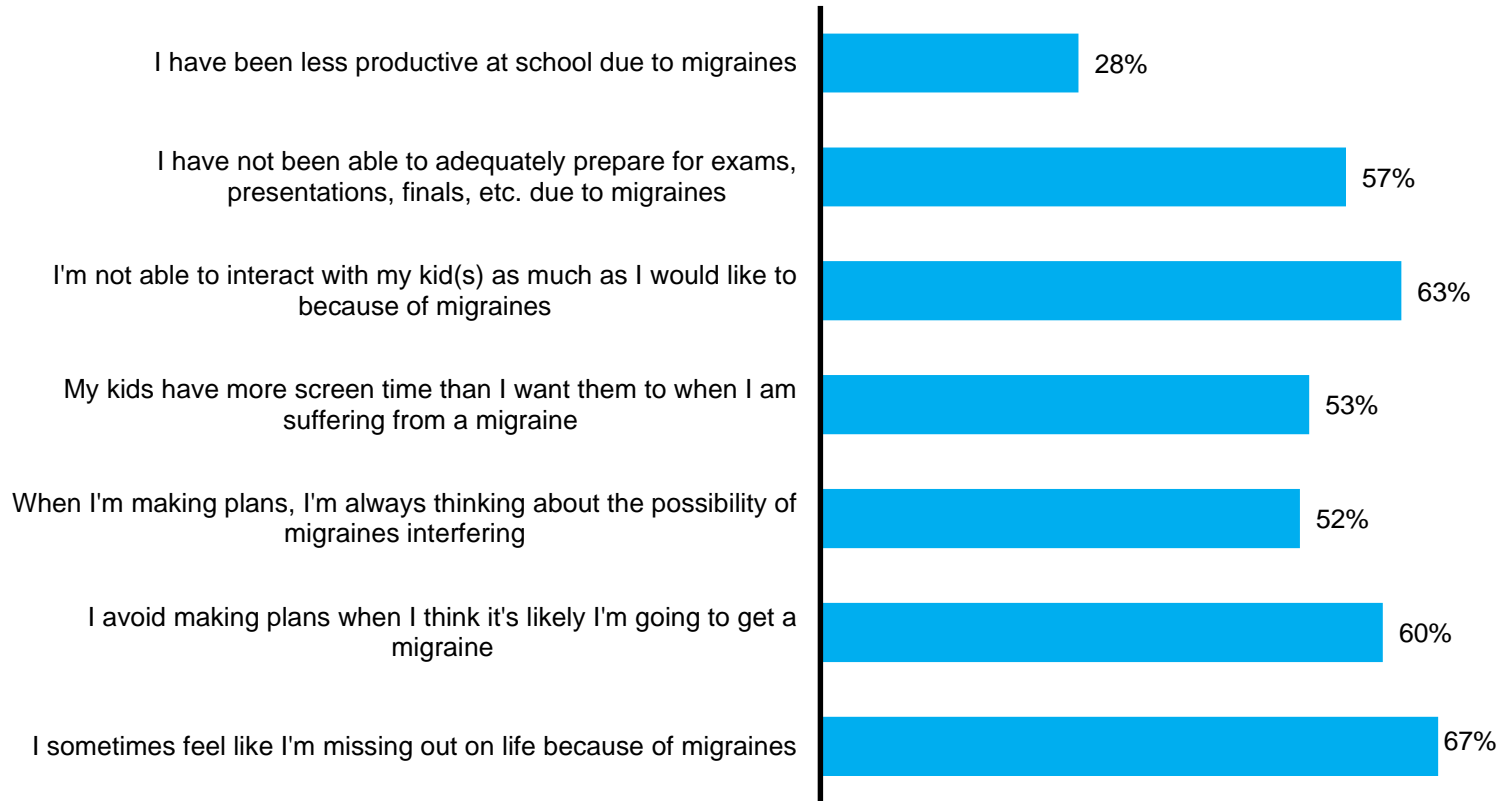


Base: All respondents; Migraine (Base Varies), Knows Someone with Migraine (Base Varies), Community (Base Varies)

Q15. Using the scale shown below, please indicate how much you agree or disagree with the following statements.

AGREEMENT STATEMENTS: PEOPLE DIAGNOSED WITH MIGRAINE n

% Agree Top 3 Box

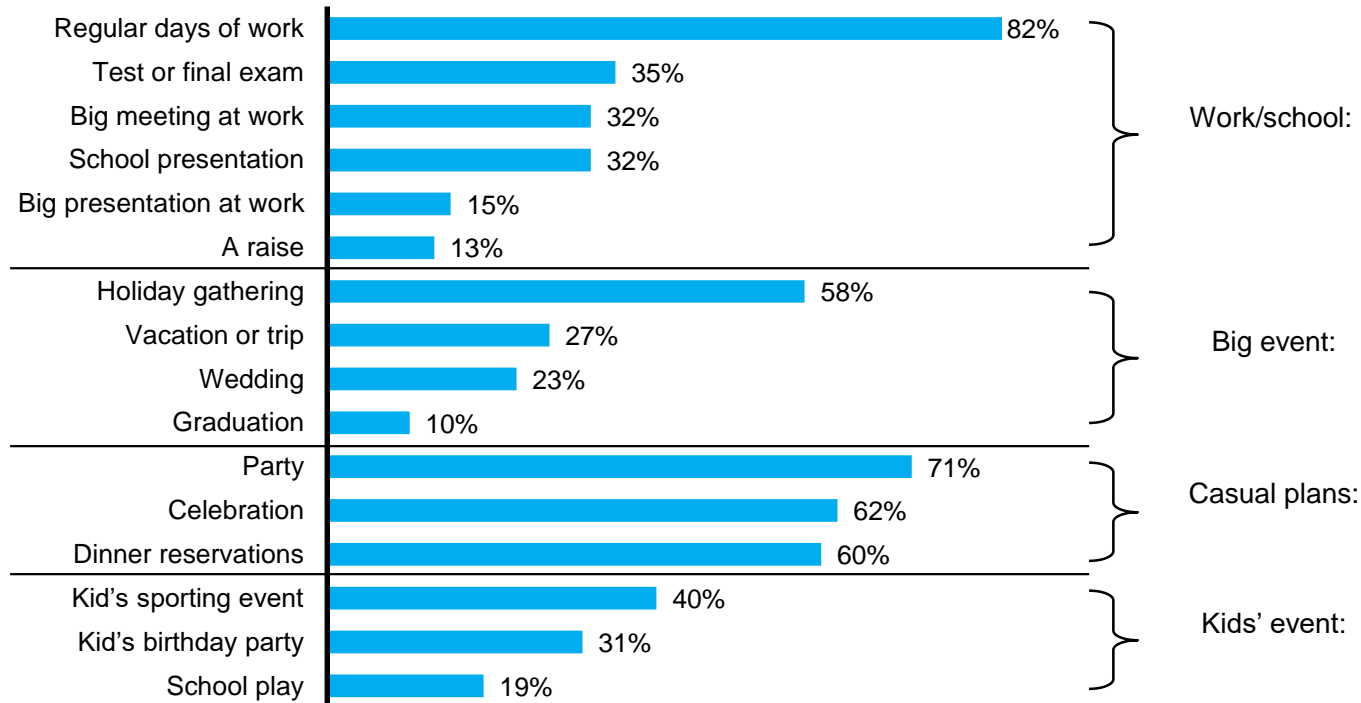


Base: Migraine (Base Varies)

Q15. Using the scale shown below, please indicate how much you agree or disagree with the following statements.

EVENTS MISSED DUE TO MIGRAINE

Events Missed Due to Migraine: People diagnosed with migraine

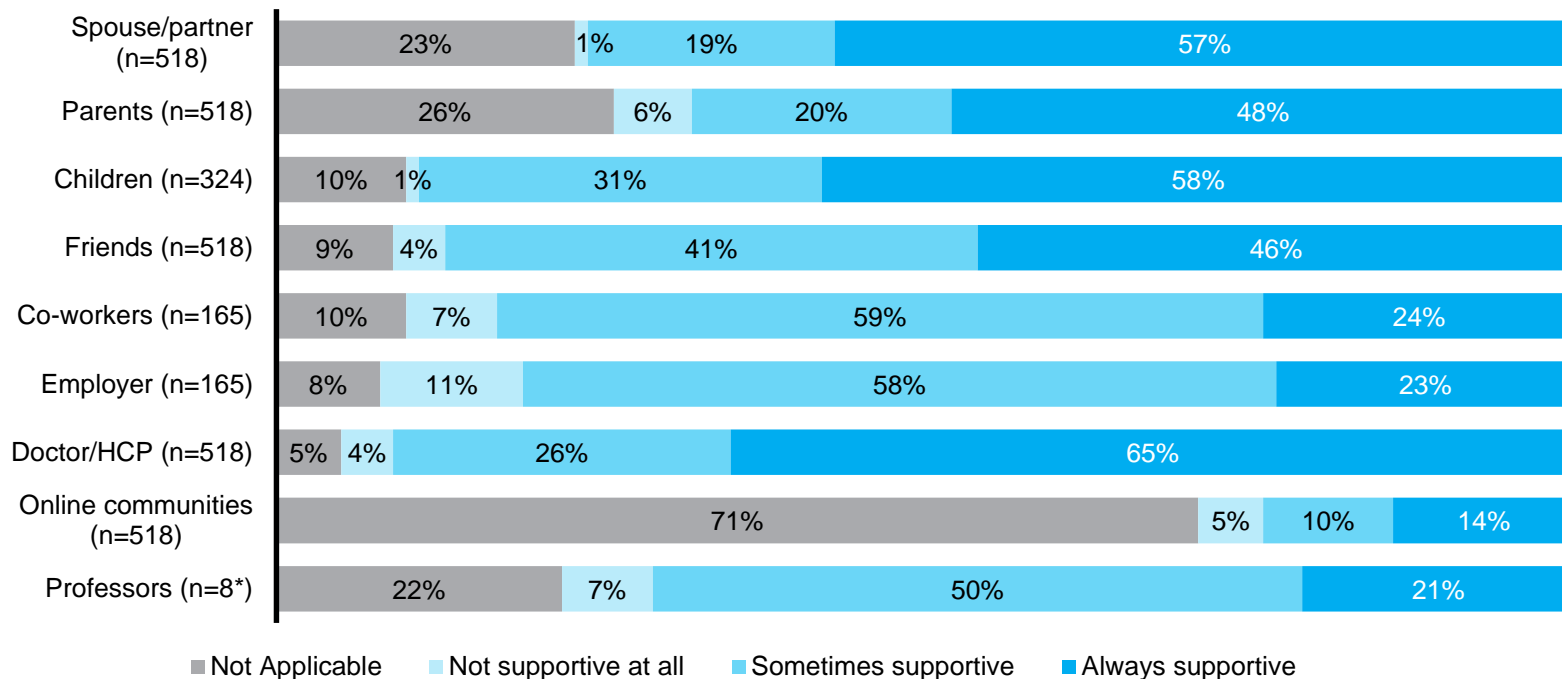


Base: Migraine (n=399)

Q16. Have you ever missed any of the following because of migraines?

LEVEL OF SUPPORT

Level of Support

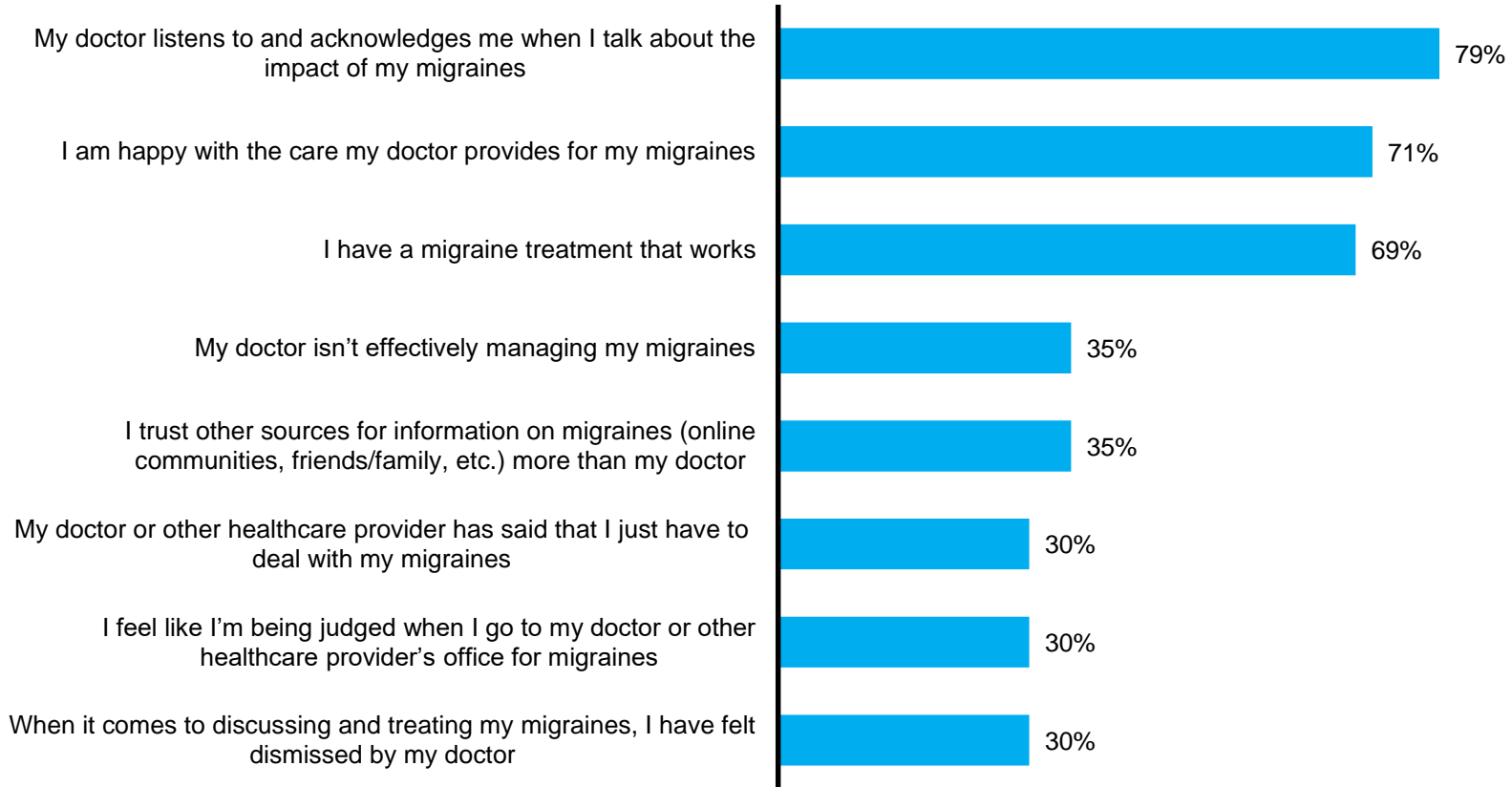


Base: Migraine (n=518)

Q19. How supportive are each of the following people when it comes to migraines and the effects they have on your life?

AGREEMENT STATEMENTS: PEOPLE DIAGNOSED WITH MIGRAINE n

% Agree Top 3 Box

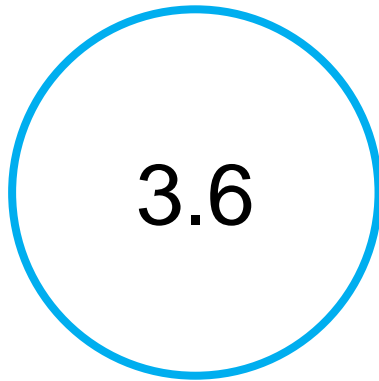


Base: Migraine (n=518)

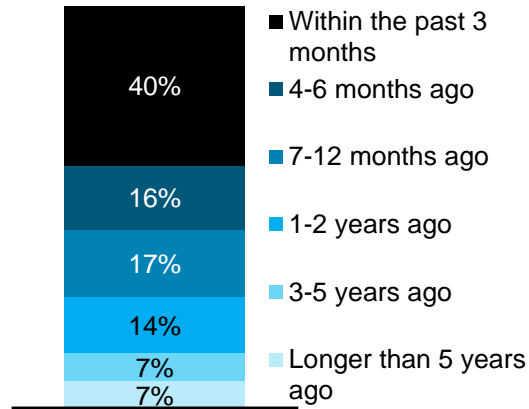
Q21. Using the scale shown below, please indicate how much you agree or disagree with the following statements.

RELATIONSHIP WITH DOCTOR

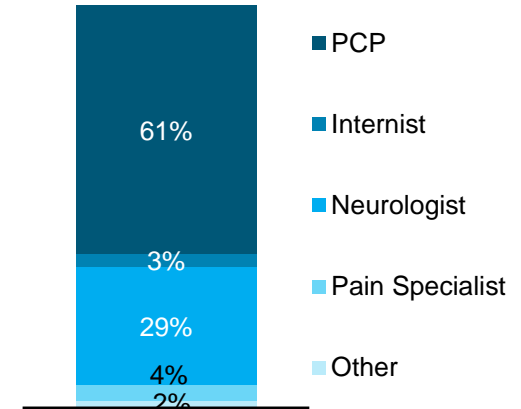
Average Doctors/ HCPs Seen for Treatment of Migraine, Since Diagnosis



Last Time Talked to Doctor About Migraine



Type of Doctor Most Recently Seen for Migraine



Base: Migraine (n=518)

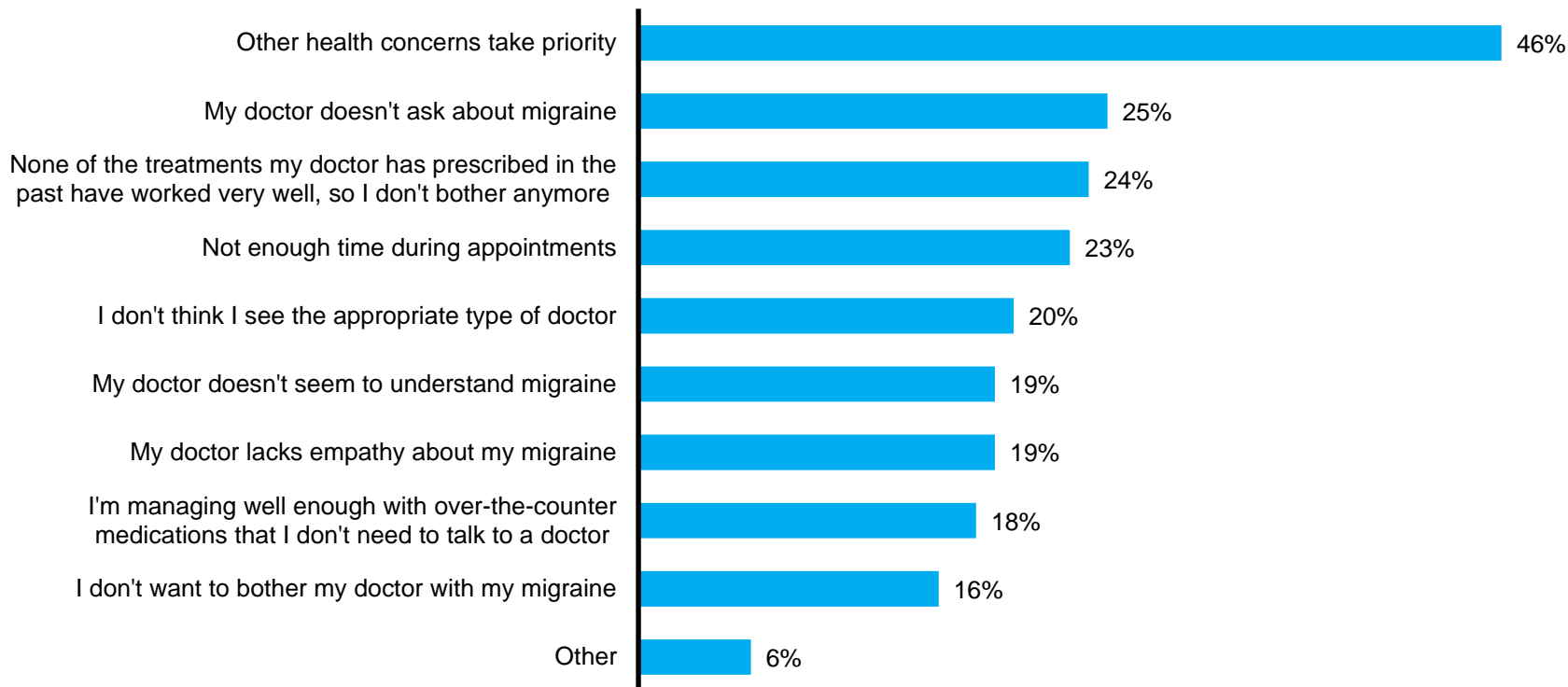
Q22. How many doctors or healthcare providers have you seen for the treatment of your migraine, since your diagnosis of migraines?

Q22b. When is the last time you talked to a doctor about your migraines?

Q22bn. What type of doctor have you most recently talked to about your migraines?

DOCTOR CHALLENGES

Challenges Around Talking to Doctor About Migraine: People diagnosed with migraine

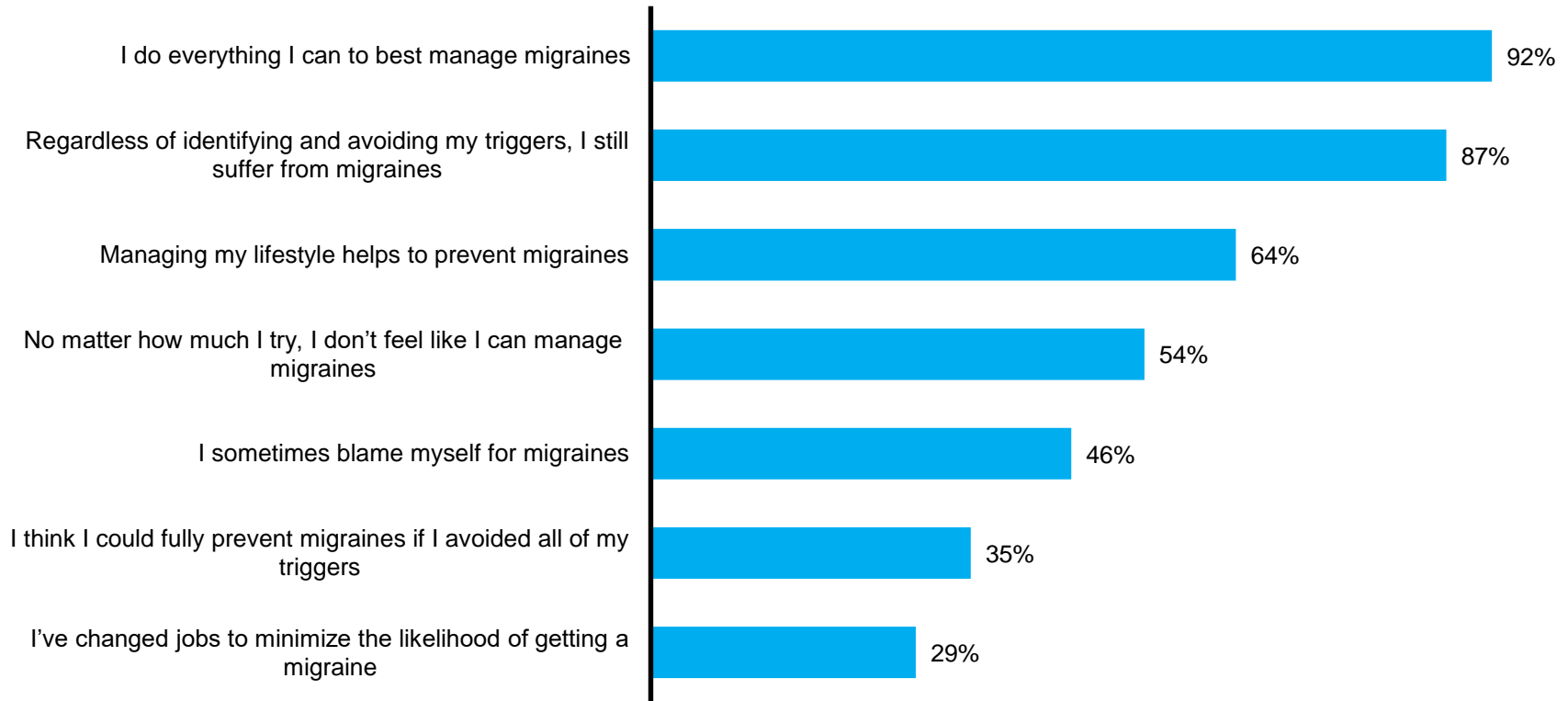


Base: Migraine (n=518)

Q22c. Do you have any of the following challenges around talking to your doctor about migraine?

AGREEMENT STATEMENTS: PEOPLE DIAGNOSED WITH MIGRAINE

% Agree Top 3 Box

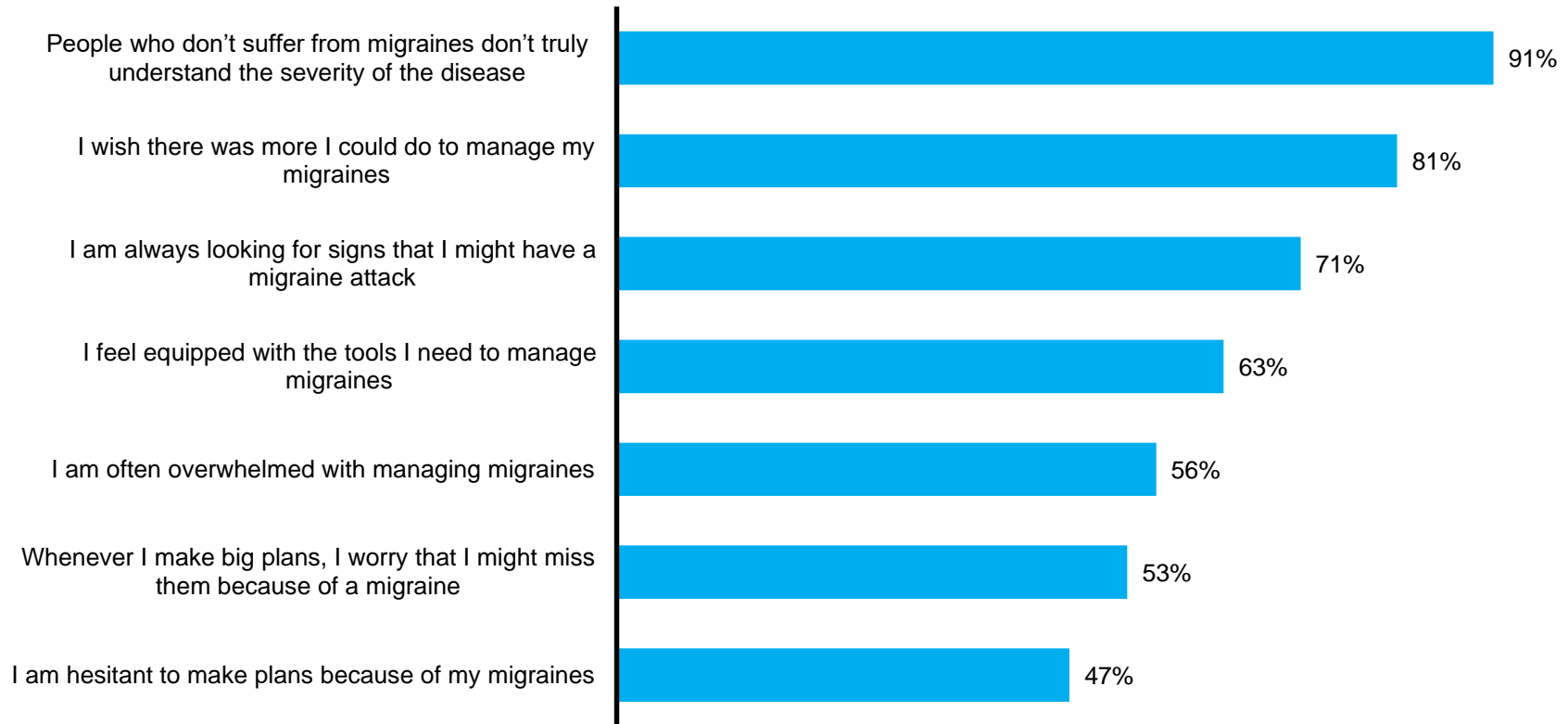


Base: Migraine (n=518)

Q21n. Using the scale shown below, please indicate how much you agree or disagree with the following statements.

AGREEMENT STATEMENTS: PEOPLE DIAGNOSED WITH MIGRAINE n

% Agree Top 3 Box

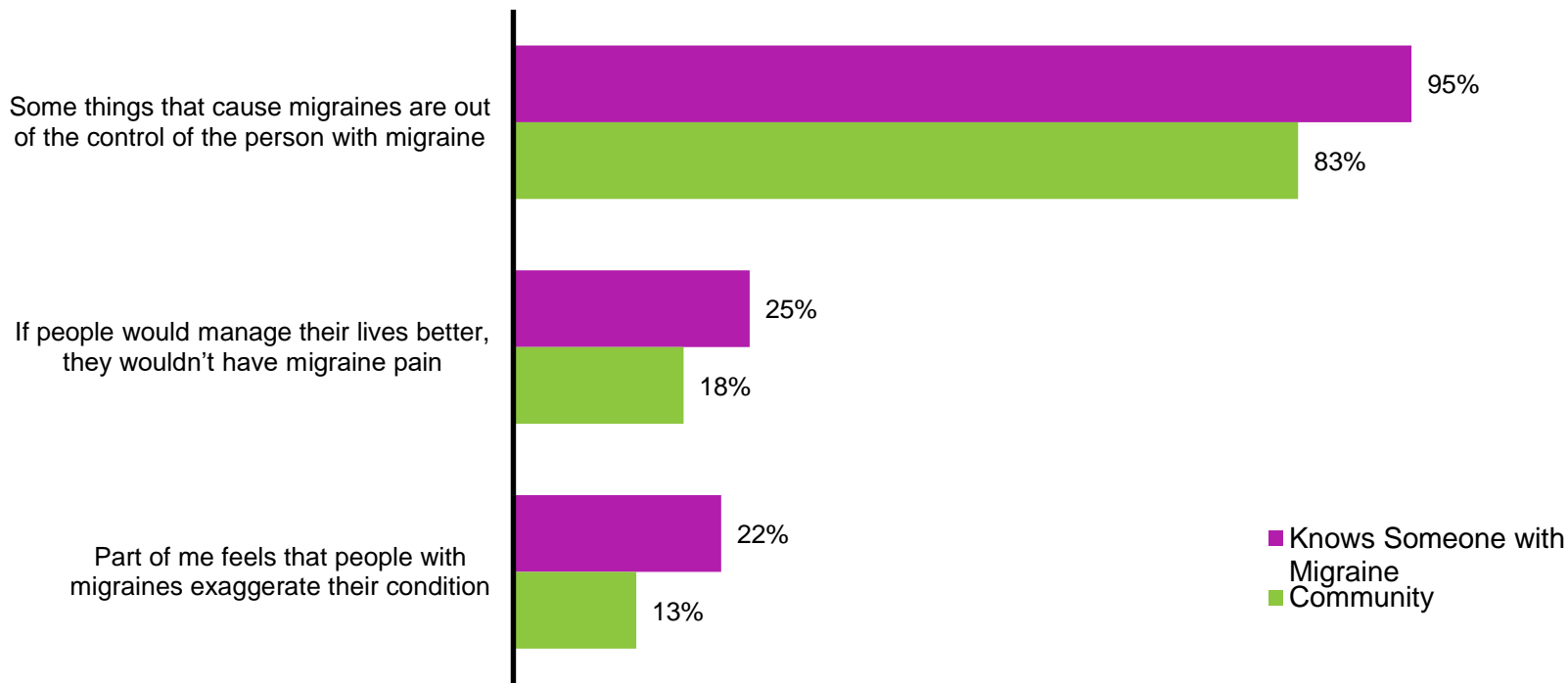


Base: Migraine (n=518)

Q21n. Using the scale shown below, please indicate how much you agree or disagree with the following statements.

AGREEMENT STATEMENTS: PEOPLE WITHOUT MIGRAINE

% Agree Top 3 Box

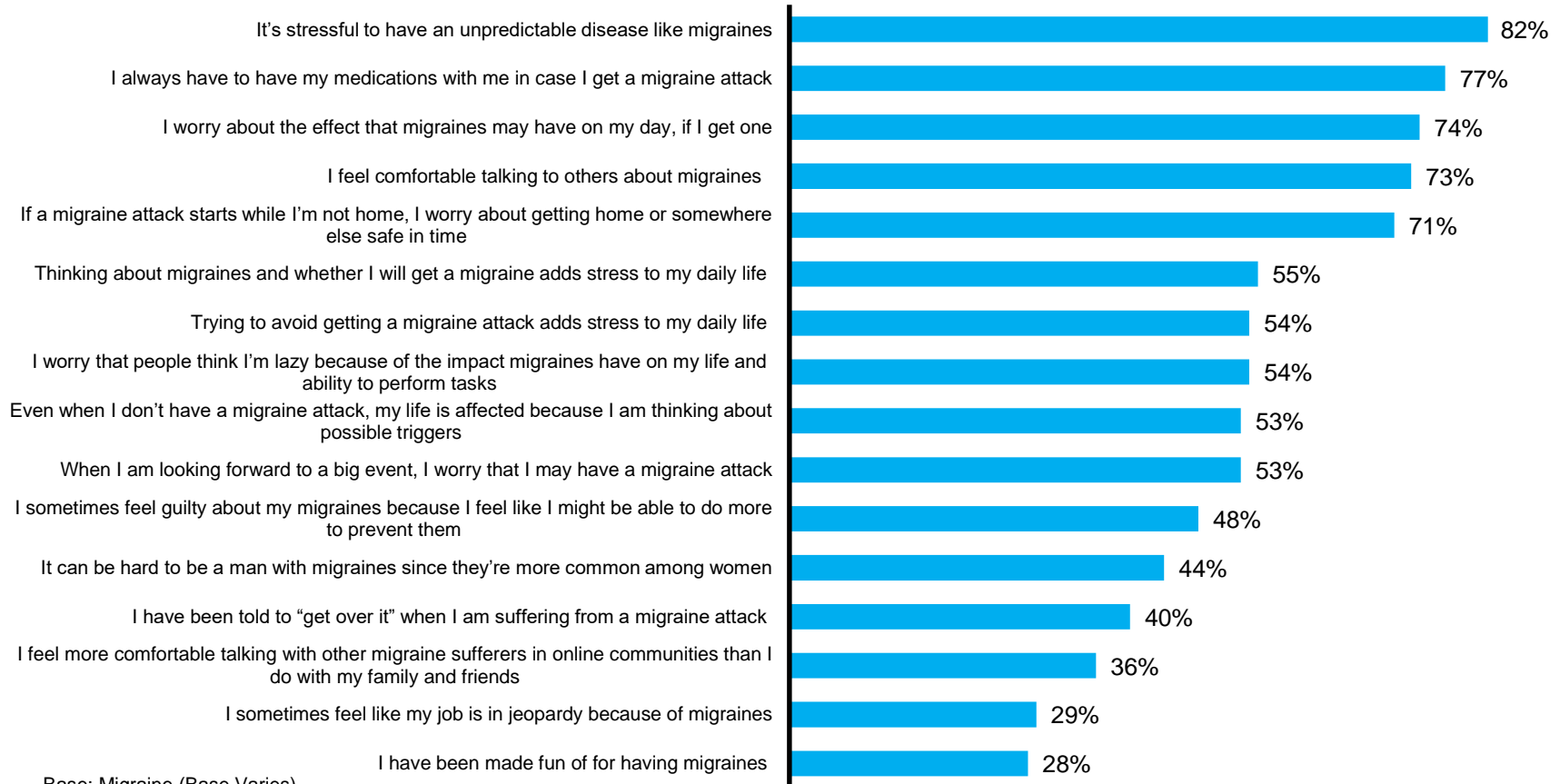


Base: All respondents; Knows Someone with Migraine (n=200), Community (n=300)

Q21n. Using the scale shown below, please indicate how much you agree or disagree with the following statements.

AGREEMENT STATEMENTS: PEOPLE DIAGNOSED WITH MIGRAINE n

% Agree Top 3 Box

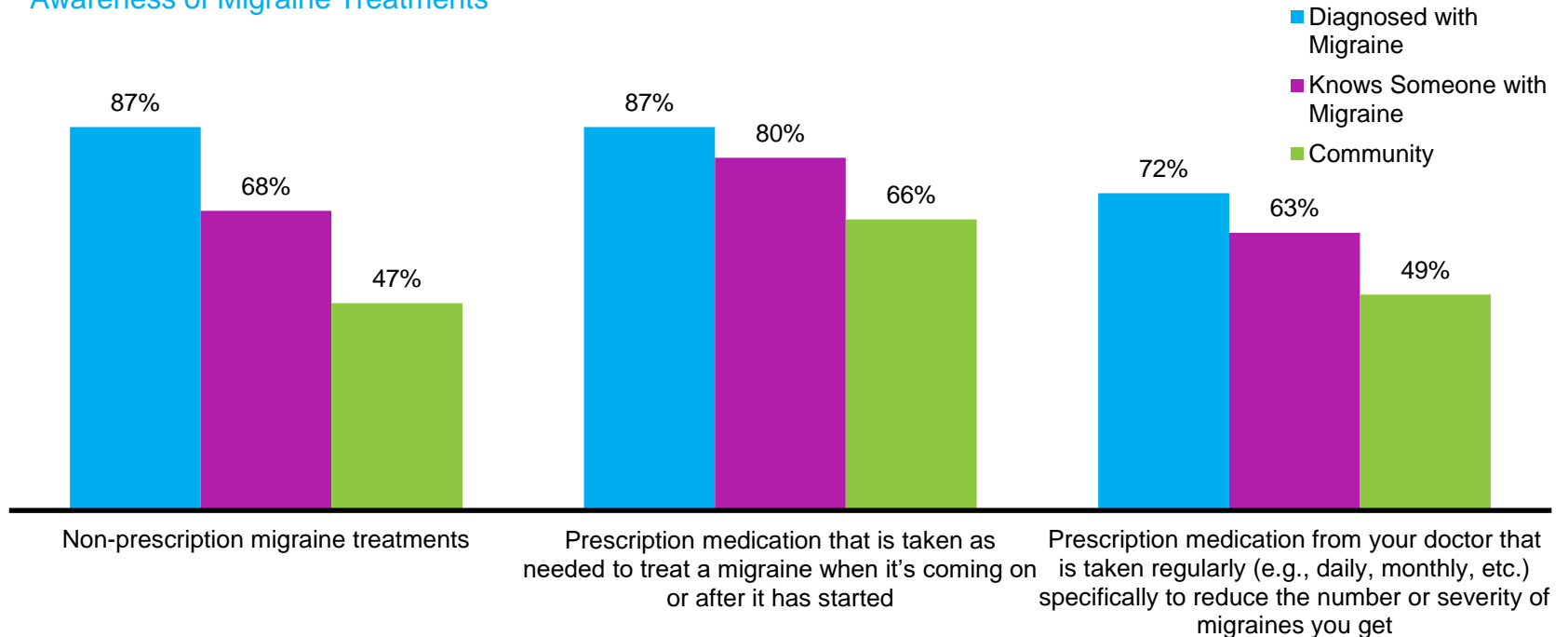


Base: Migraine (Base Varies)

Q23. Using the scale shown below, please indicate how much you agree or disagree with the following statements.

AWARENESS OF MIGRAINE TREATMENTS

Awareness of Migraine Treatments

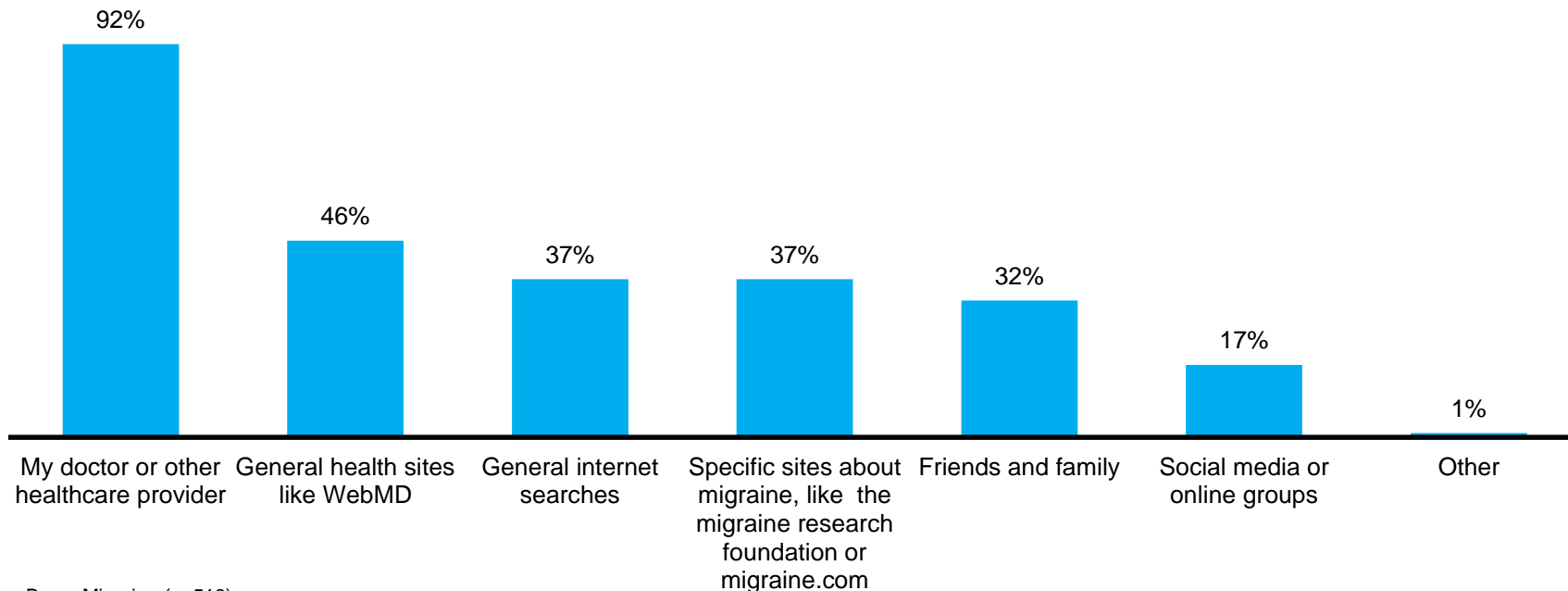


Base: All respondents; Migraine (n=518), Knows Someone with Migraine (n=200), Community (n=300)

Q26. Which of the following types of migraine treatments are you aware of?

MIGRAINE INFORMATION SOURCES

Sources Used to Look for Information About Migraine and Migraine Treatments: People diagnosed with migraine



Base: Migraine (n=518)

Q27. What sources do you use when looking for information about migraine and migraine treatments?

FOR MORE INFORMATION

For more details about the 2017 Migraine Impact Report, please click here [INSERT HYPERLINK TO Multimedia News Release]. For more information about migraine and resources available for patients, such as finding a doctor in your area, visit the American Migraine Foundation [website](#).

About the 2017 Migraine Impact Report

The 2017 Migraine Impact Report is a 15-minute, online, quantitative opinion survey conducted by Nielsen on behalf of Eli Lilly and Company in May 2017. The survey was completed by 1,018 U.S. adults, including 518 people who have been diagnosed with migraine by a healthcare provider, 200 people who know a family member with migraine, and 300 community members who do not know someone with migraine. Data for both people diagnosed with migraine and the general population were weighted to ensure representation from each group. Survey respondents were not restricted based on frequency or severity of migraine.

About the American Migraine Foundation

The American Migraine Foundation is a nonprofit foundation supported by the American Headache Society and generous donors dedicated to the advancement of migraine research. Its mission is to support innovative research that will lead to improvement in the lives of those who suffer from migraine and other disabling headaches. www.americanmigrainefoundation.org is the companion website to the American Headache Society (www.americanheadachesociety.org), the professional services organization for the world's foremost clinicians and researchers working in migraine.

About Lilly in Migraine

Lilly has been committed to helping people suffering from migraine for over 25 years, investigating more than a dozen different compounds for the treatment of headache disorders. These research programs have accelerated understanding of this disease and advanced the development of Lilly's comprehensive late-stage development programs studying potential treatments for the acute and preventive treatment of migraine. Our goal is to make life better for people diagnosed with migraine by offering comprehensive solutions to prevent or stop this disabling disease. The combined clinical, academic and professional experience of our experts helps us to build our research portfolio, identify challenges for healthcare providers and pinpoint the needs of patients living with migraine and cluster headache.

About Eli Lilly and Company

Lilly is a global healthcare leader that unites caring with discovery to make life better for people around the world. We were founded more than a century ago by a man committed to creating high-quality medicines that meet real needs, and today we remain true to that mission in all our work. Across the globe, Lilly employees work to discover and bring life-changing medicines to those who need them, improve the understanding and management of disease, and give back to communities through philanthropy and volunteerism. To learn more about Lilly, please visit us at www.lilly.com and www.lilly.com/newsroom/social-channels.