

# EMHA Migraine in Women Survey

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Final Analysis

# Objective of the project

This project aims to position hormonal migraine as a women's health priority



**Generate patient insight** to highlight the real-world impact of hormonal migraine and support its prioritisation within women's health policy.



**Educate patients and clinicians** about hormonal migraine during a major medical congress (e.g., EAN, HIS).



**Host a women's health panel** bringing together healthcare professionals (e.g., neurologists, gynaecologists), policy-makers and patients to share perspectives and solutions.

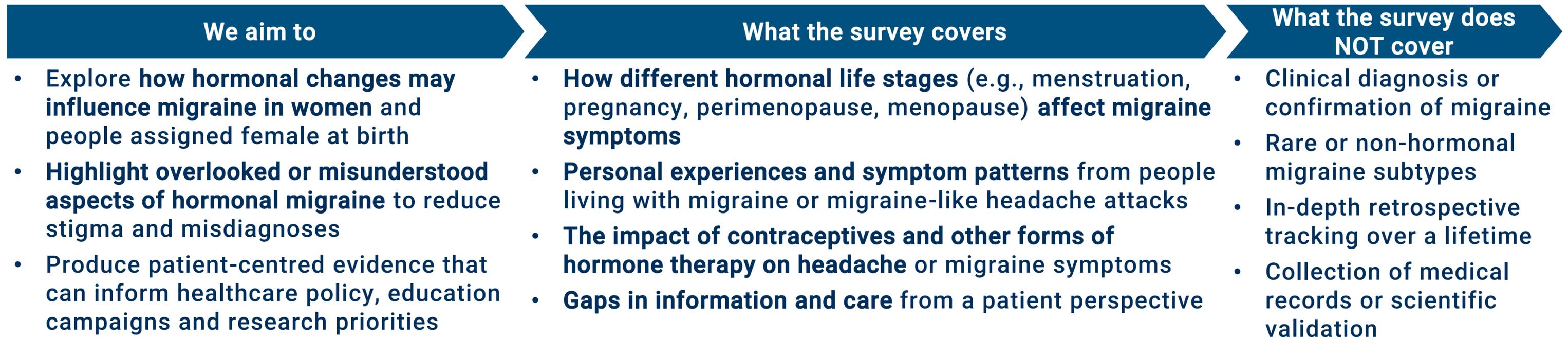


**Publish a public-facing manifesto**, with a strong call to action, for better recognition and care pathways for hormonal migraine.

# Methodology and respondent profile

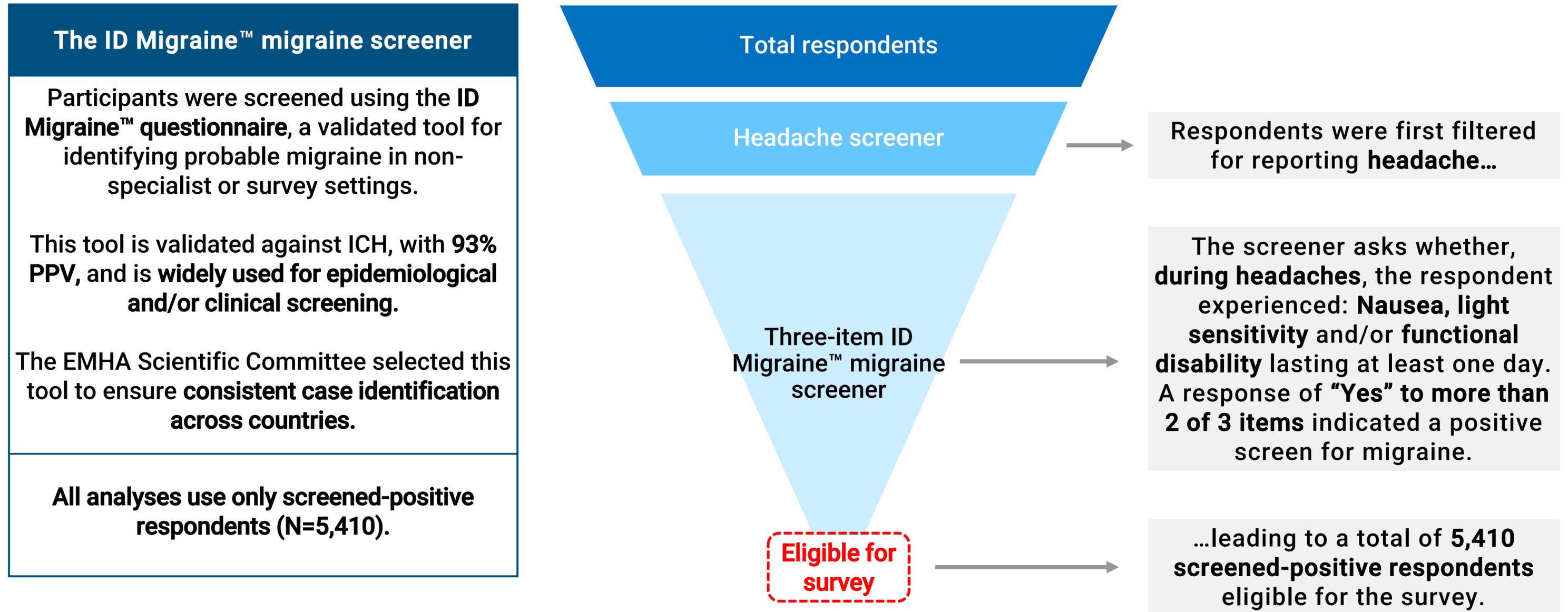
# Scope and Objectives

The EMHA Migraine in Women Survey was divided into the following categories



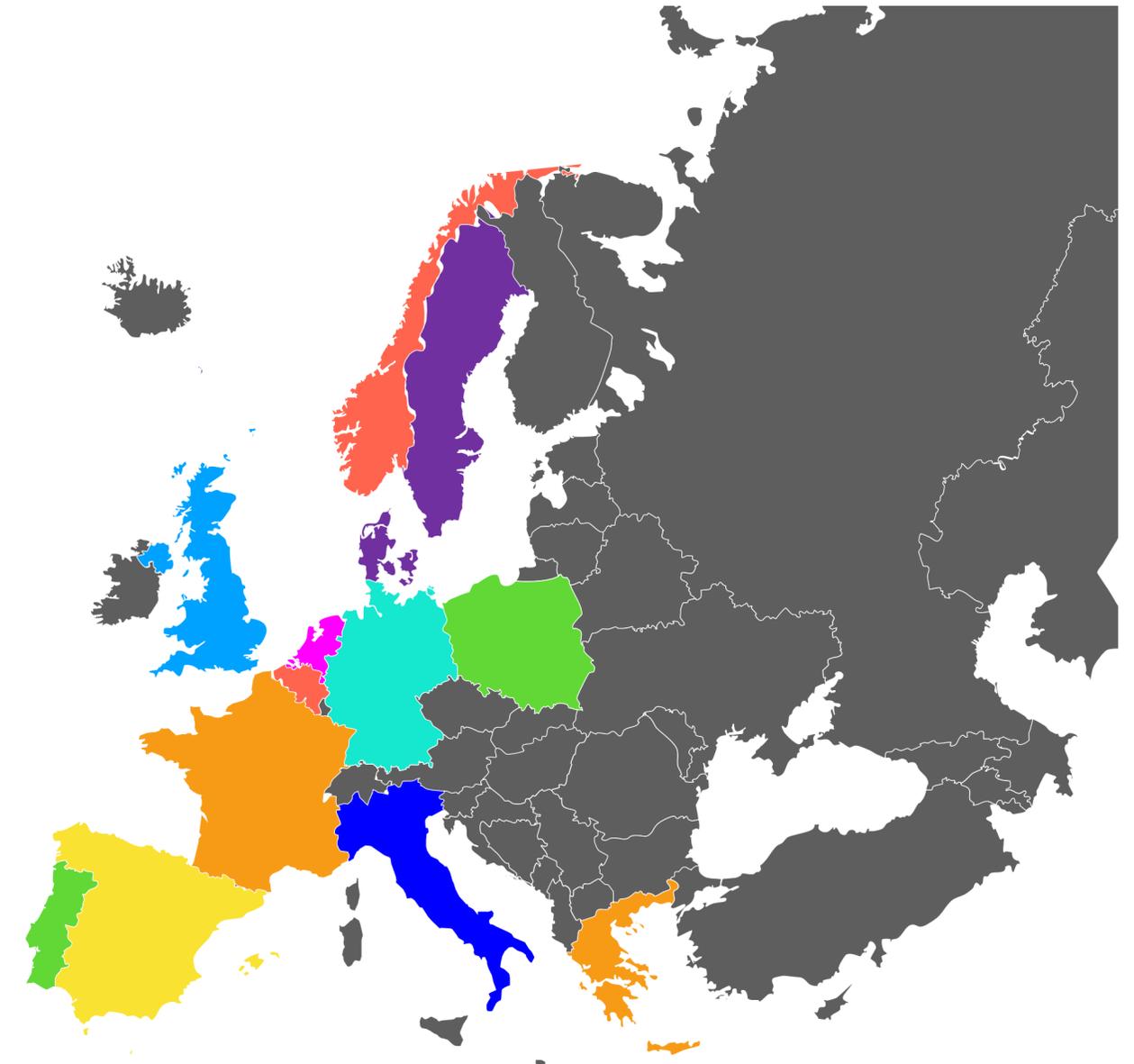
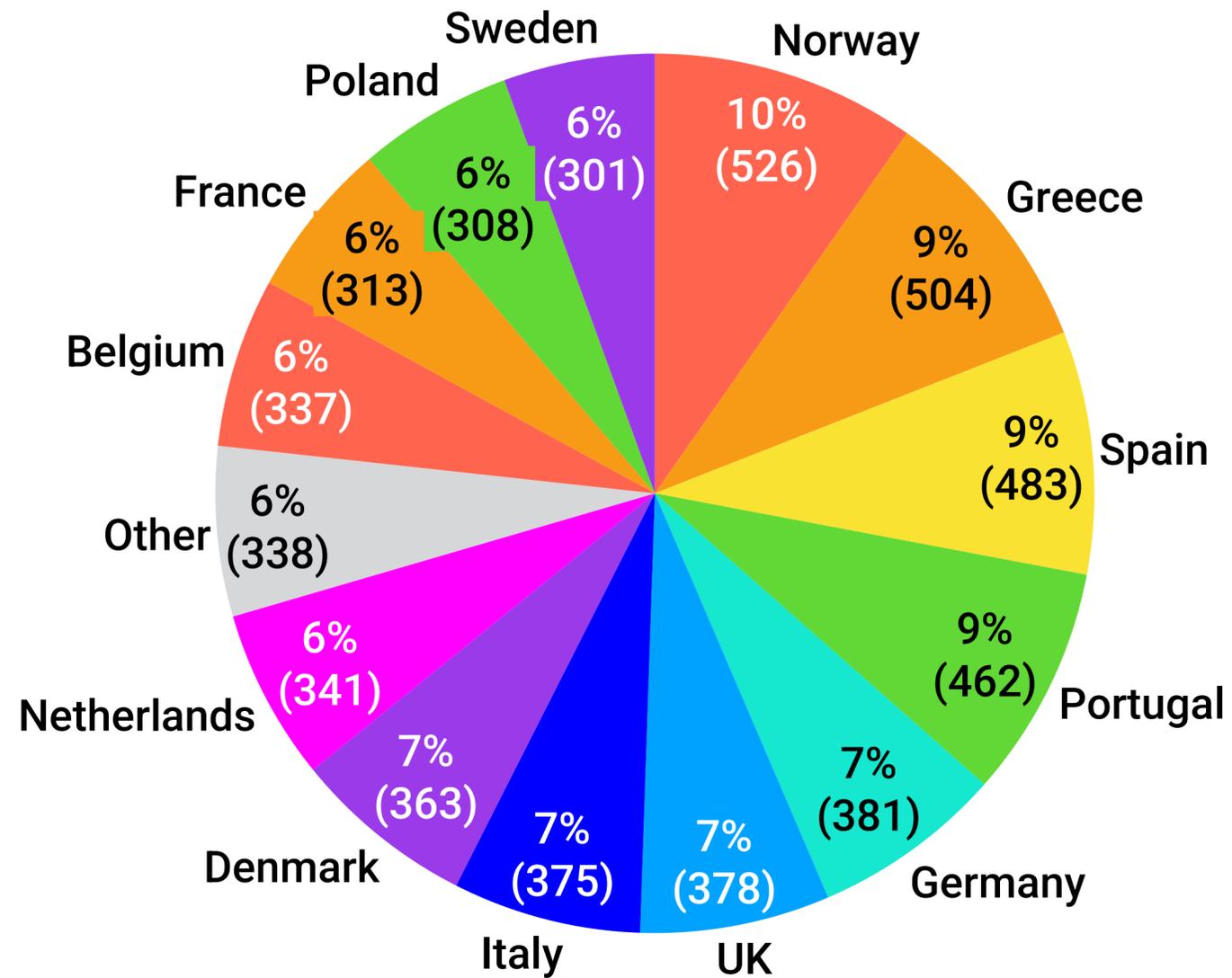
# Eligibility for survey

5,410 respondents met validated migraine screening criteria



# Countries of residence

5,410 responses have been obtained; the most represented countries are Norway, Greece, Spain, Portugal and Germany (44%)

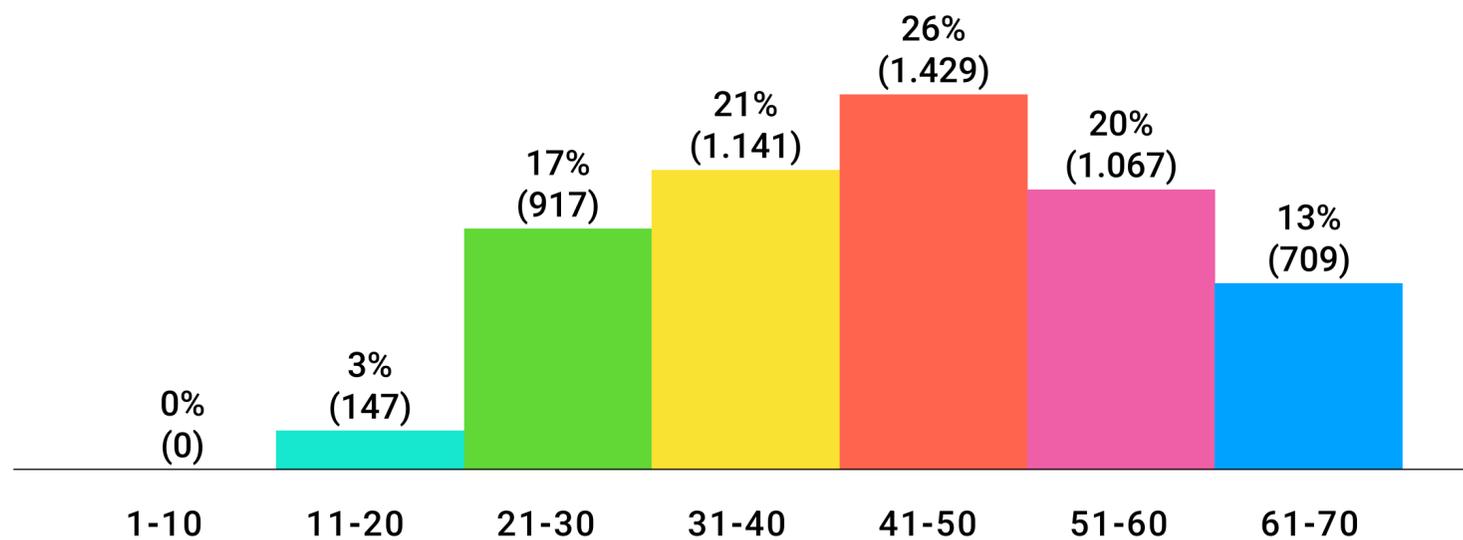


Sources: Prescient Analysis, Migraine in Women Survey (sample size for this question: 5,410).

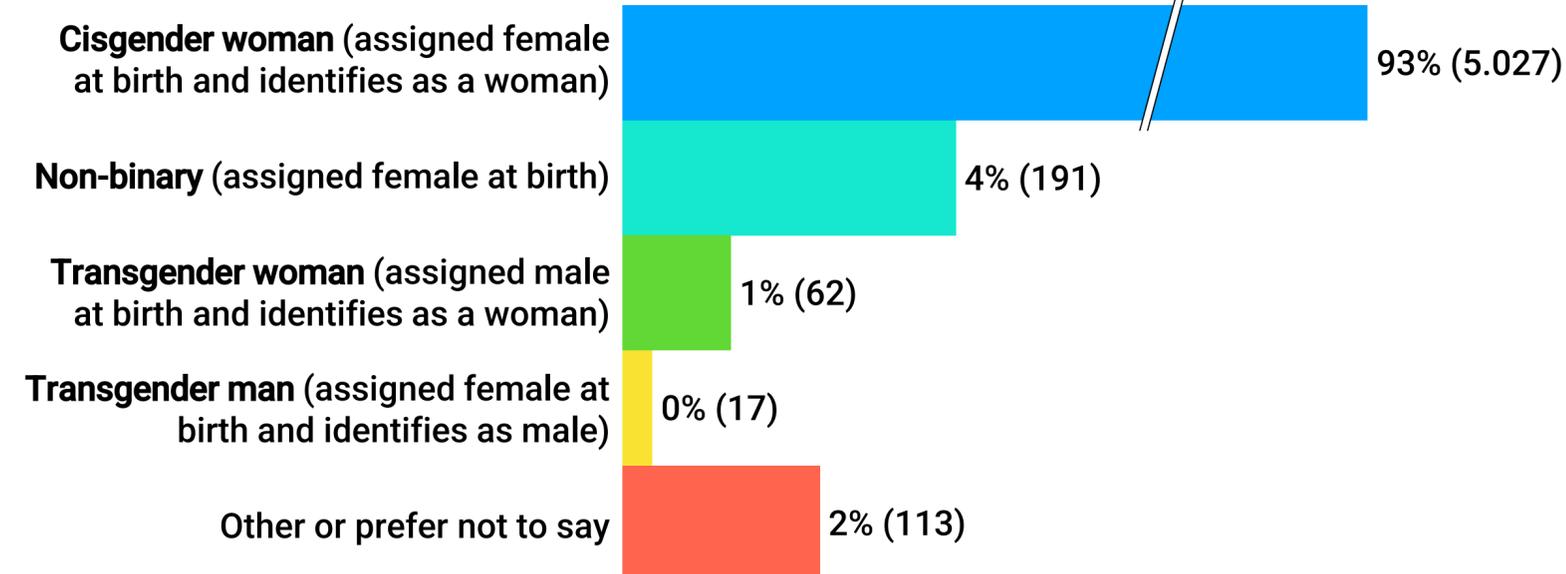
# Sociodemographic data (1/2)

Respondents are mostly cisgender women aged between 31 and 60, with family history of migraines and/or headache attacks

Age distribution of respondents



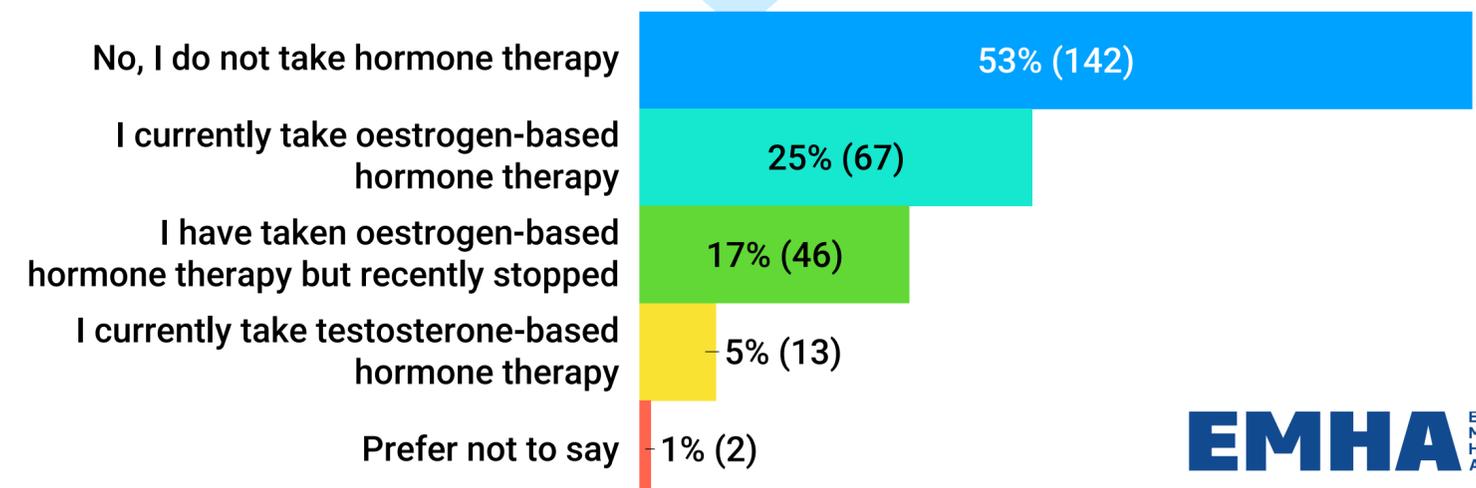
Gender identity of respondents



Family history of migraine and/or headache attacks



Hormone therapy (for transgender women, non-binary and/or transgender men)

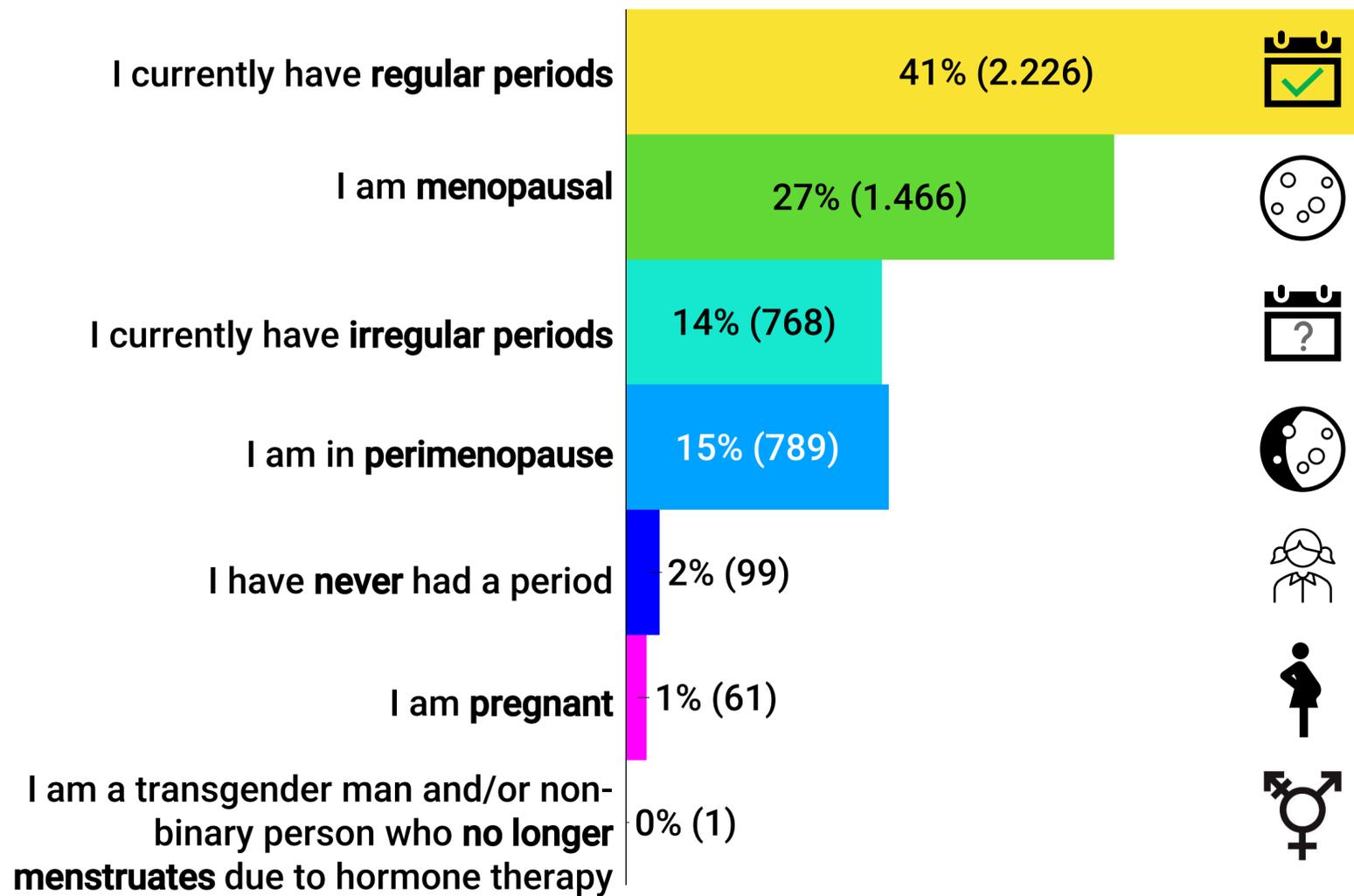


Sources: Prescient Analysis, Migraine in Women Survey (sample size for this question: 5,410).

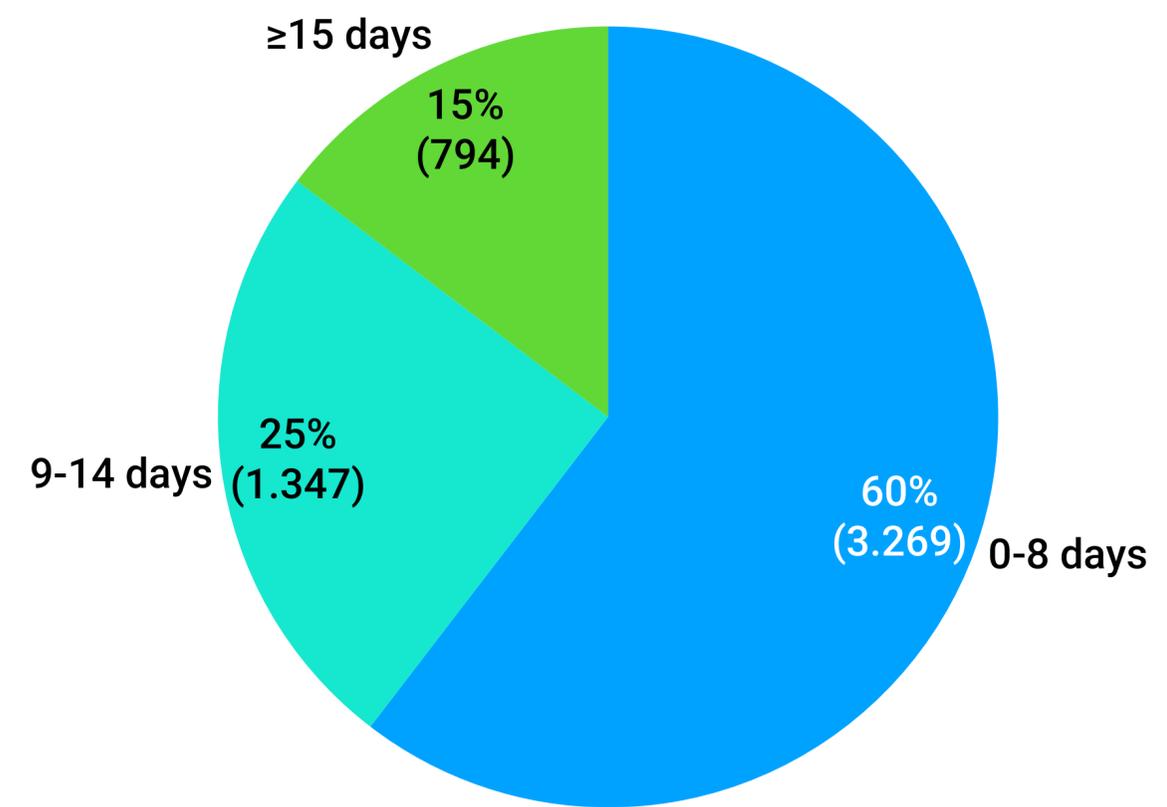
# Sociodemographic data (2/2)

More than 2 in 3 respondents are either menopausal or have regular periods; 2 in 3 respondents experience 0-8 headache days per month

Hormonal stage



How many headache days did you get per month in the last 3 months?

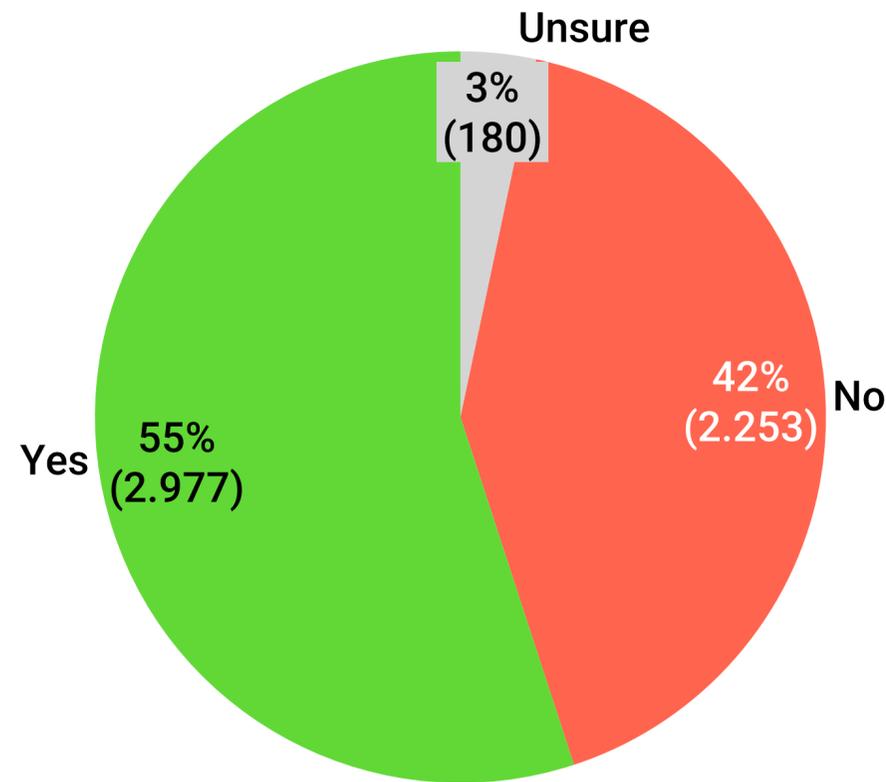


Sources: Prescient Analysis, Migraine in Women Survey (sample size for this question: 4,542).

# Formal migraine diagnosis (1/3)

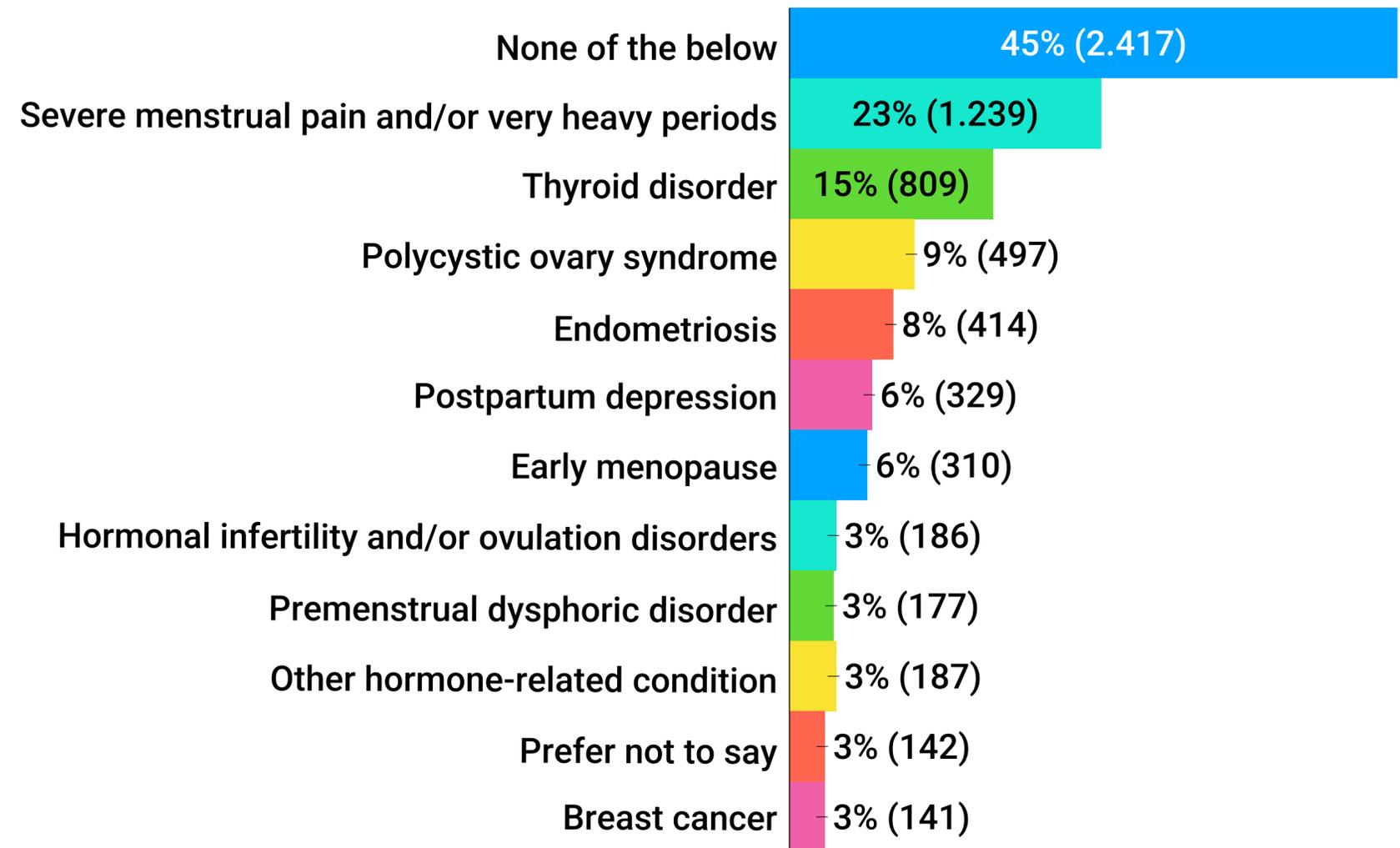
Overall, 42% of screened-positive respondents have never received a formal migraine diagnosis

## Formal diagnosis of migraine



According to global epidemiological data, 14-15% of the population has migraine globally, and approximately 11.4% of the adult population in Europe.

## Formal diagnosis of other conditions

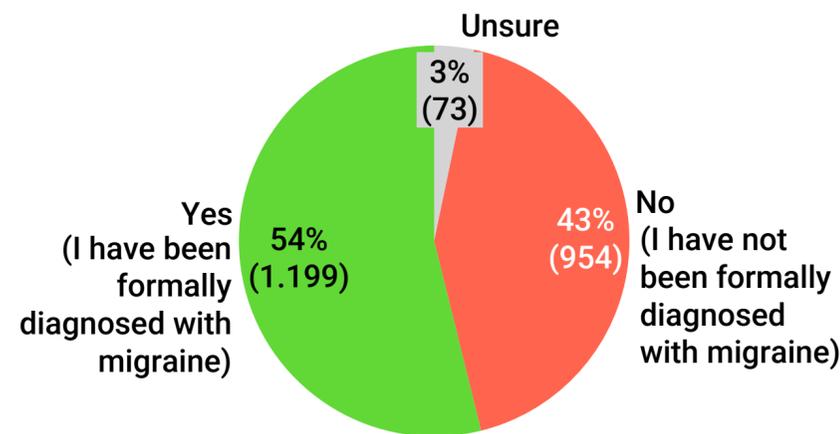


# Formal migraine diagnosis (2/3)

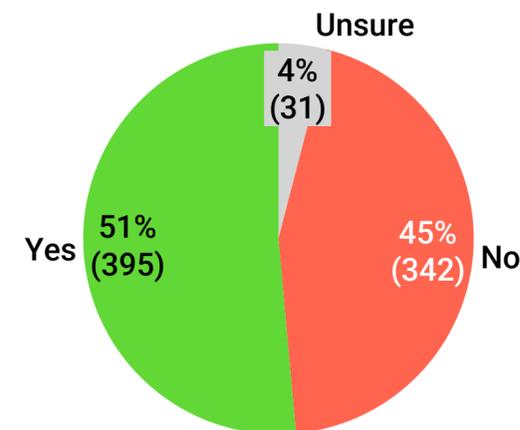
The biggest gaps in migraine diagnosis are seen in pregnant women and those with irregular periods

## (By hormonal stage) formal diagnosis of migraine

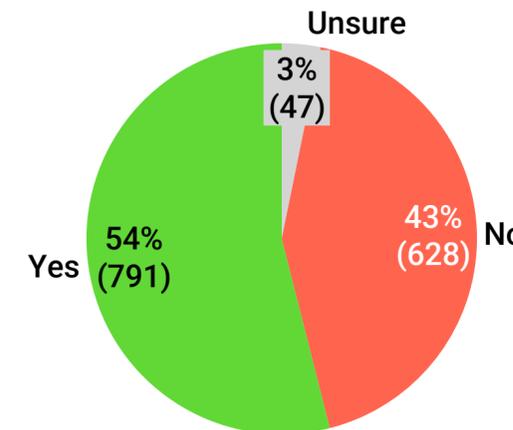
I currently have regular periods



I currently have irregular periods

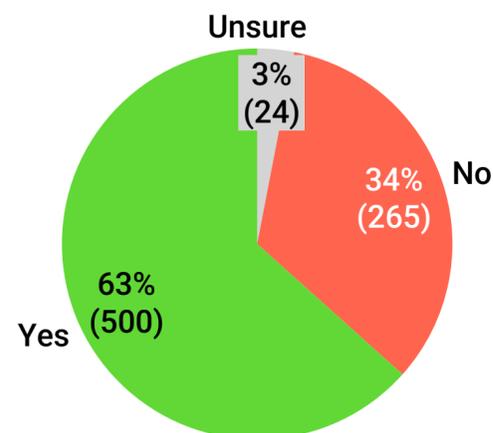


I am menopausal (no periods for 12+ months in the absence of birth control)

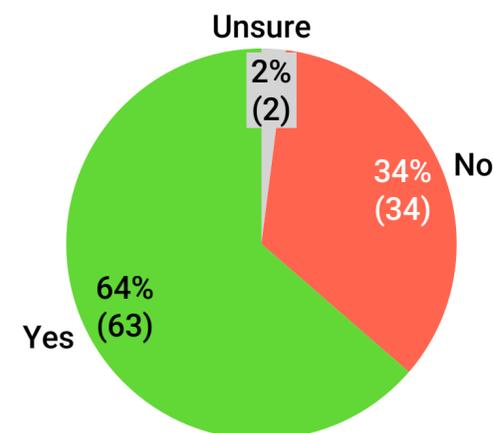


Out of the 4,460 respondents with regular periods, irregular periods and in menopause, half have a formal migraine diagnosis.

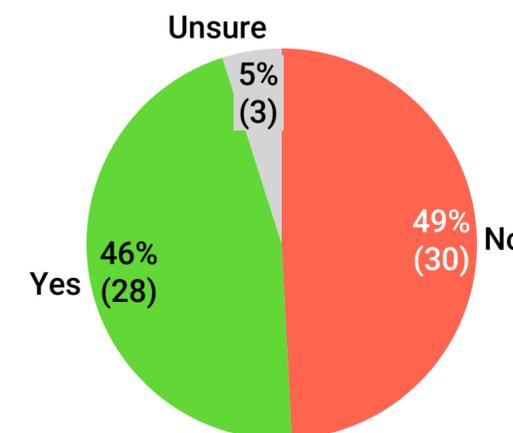
I am in perimenopause (transition to menopause and irregular periods)



I have never had a period



I am pregnant

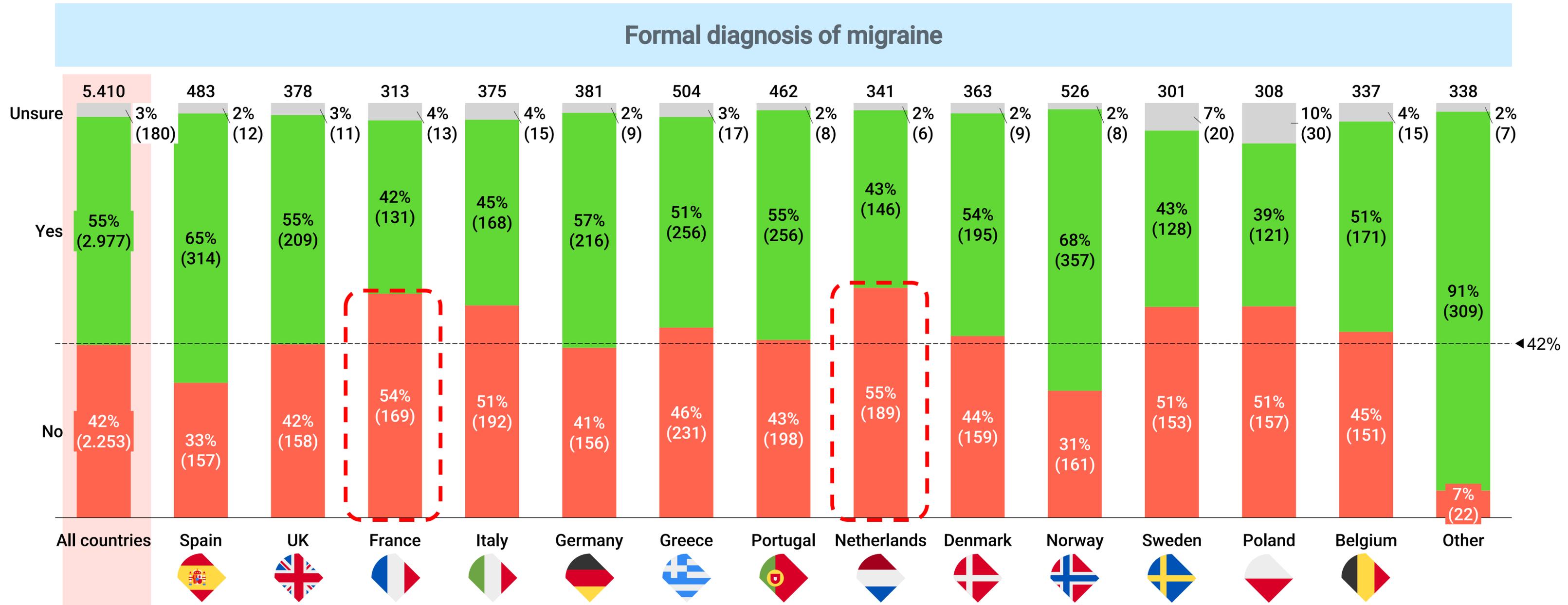


Out of the 888 respondents in perimenopause, or who have never had a period, one-third do not have a formal migraine diagnosis.

Sources: Prescient Analysis, Migraine in Women Survey (sample size for this question: 5,410).

# Formal migraine diagnosis (3/3)

The biggest gaps in migraine diagnosis are seen in France and Netherlands

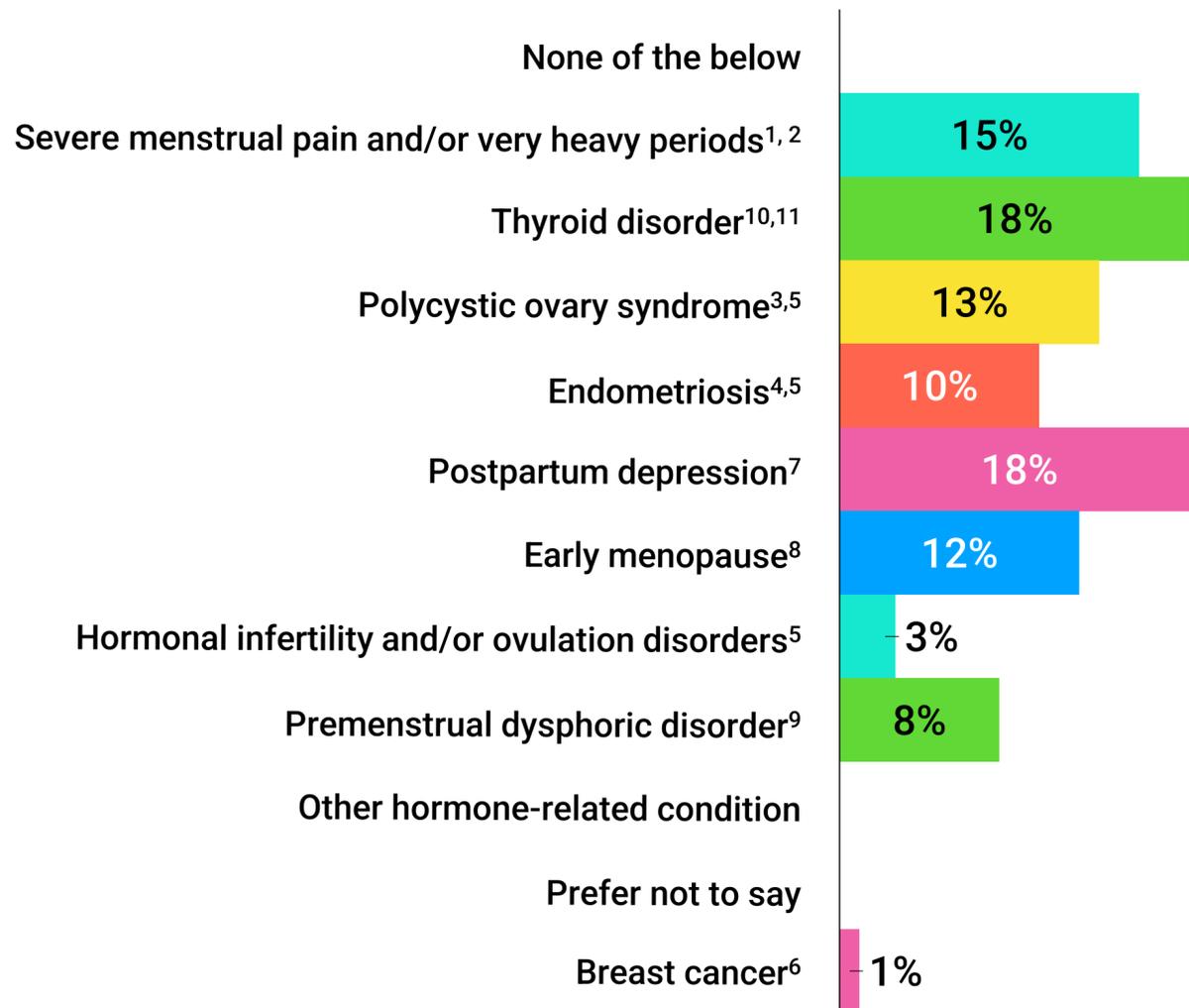


Sources: Prescient Analysis, Migraine in Women Survey (sample size for this question: 5,410).

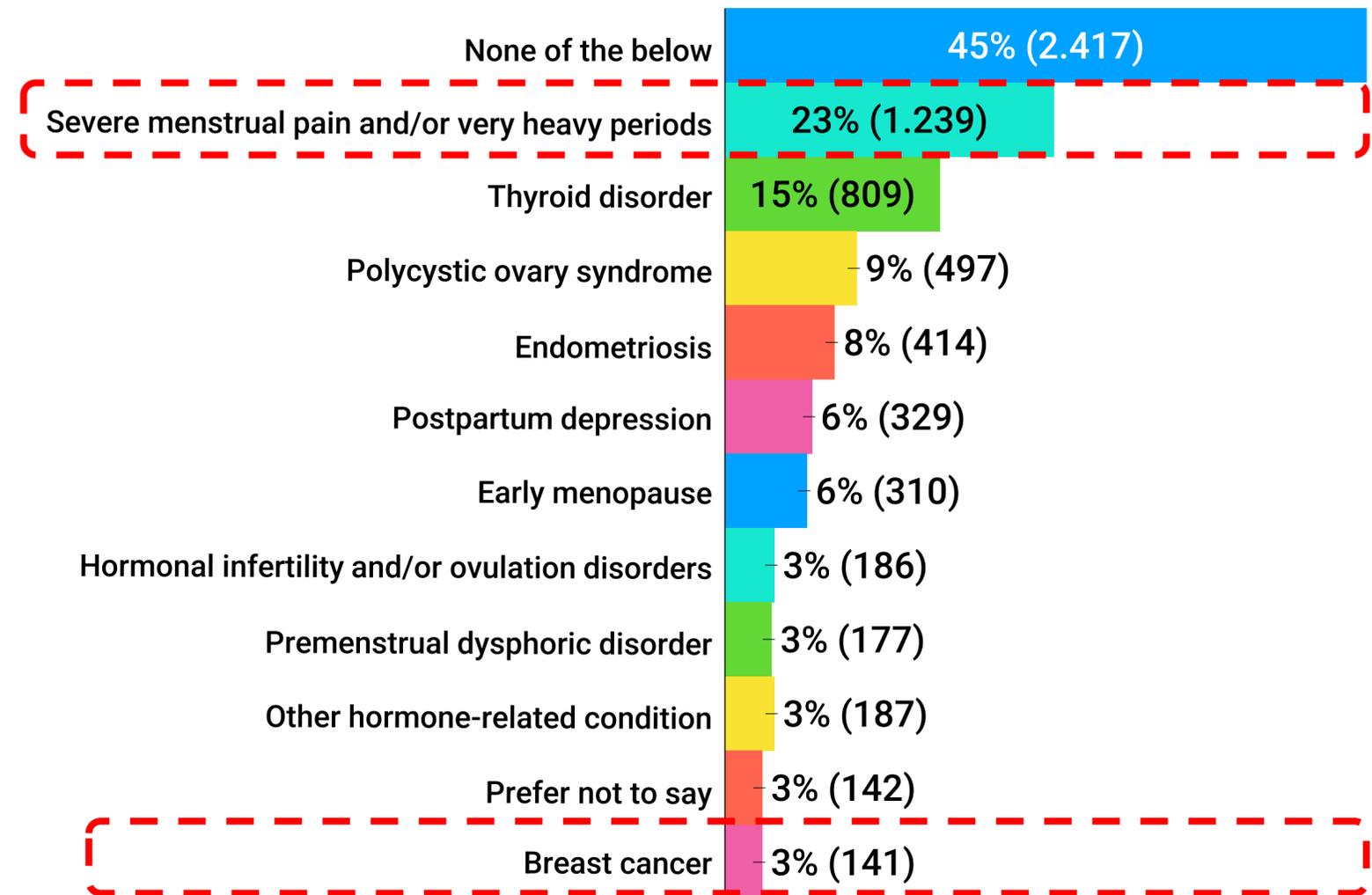
# Migraine comorbidities (1/2)

Severe menstrual pain and breast cancer appear more frequent among women with migraine than would be expected based on global epidemiological averages

## Global epidemiological prevalence



## Our survey data



Notes: Survey data reflect self-reported physician diagnosis; epidemiological estimates derive from population-level studies (2021-2024). Differences may reflect sample composition (migraine cohort) and reporting bias. See slide notes for more details on epidemiological data for the general population.  
 Abbreviations: GBD (global burden of disease); PCOS (polycystic ovary syndrome); PMDD (premenstrual dysphoric disorder); PMS (premenstrual syndrome); POI (premature ovarian insufficiency); PPD (postpartum depression); WHO (World Health Organization).  
 Sources: Prescient Analysis, Migraine in Women Survey (sample size for this question: 5,410), 1. [Yale Medicine](#); 2. [Cleveland Clinic](#); 3. [Reproductive Health \(2025\)](#); 4. PMID: 31260048; 5. PMID: 40748862; 6. [WHO \(2022\)](#); 7. PMID: 29449816; 8. PMID: 30829083; 9. Medscape (2024); 10. [Cureus](#); 11. PMID: 36311599.

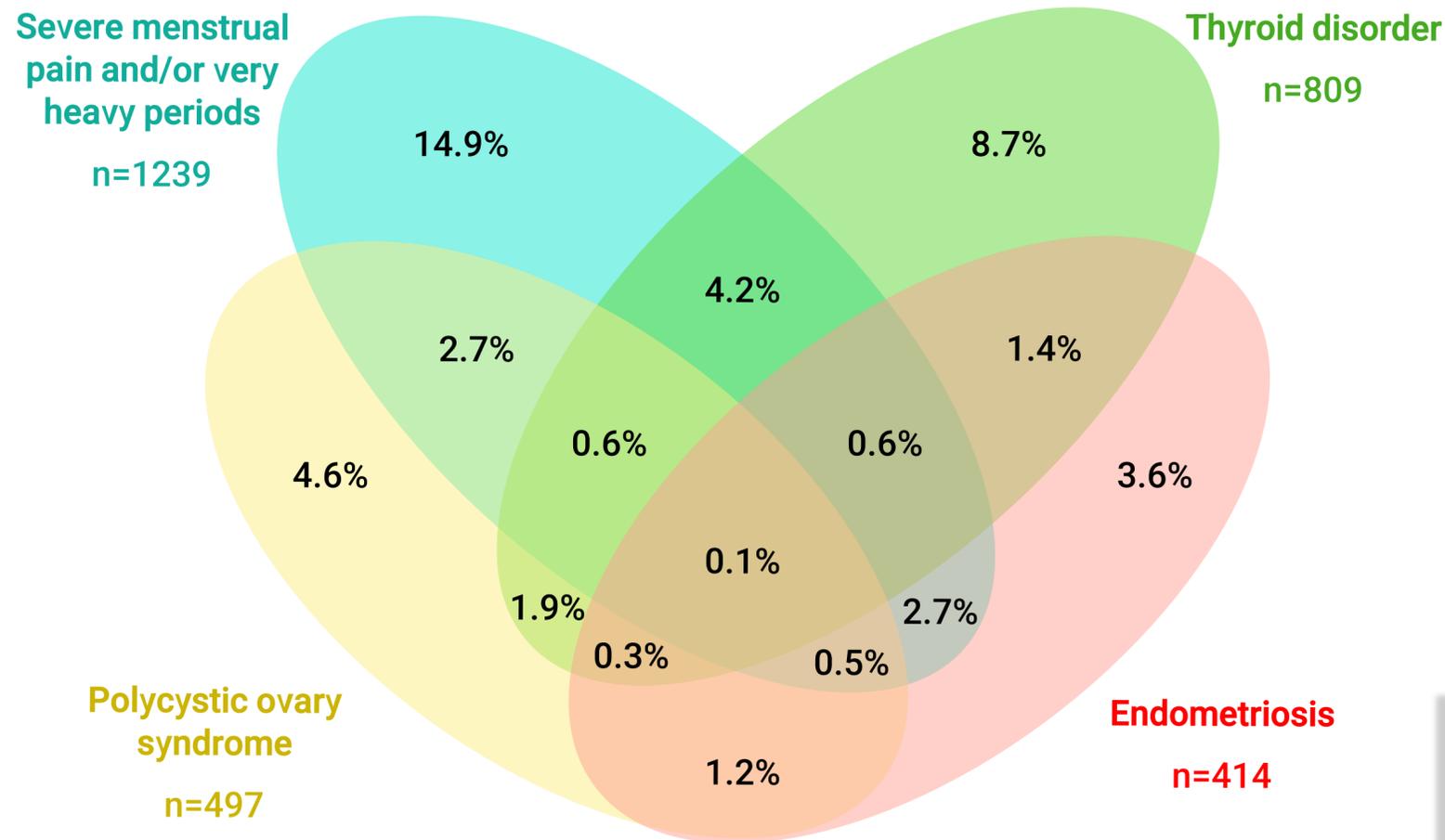
Higher than global epidemiological prevalence

# Migraine comorbidities (2/2)

Many women with migraines experience hormonal comorbidities; around one-third of those with severe menstrual pain also have endometriosis, PCOS and a thyroid disorder

## Formal diagnosis of other conditions: Overlap between the top four conditions

Among total respondents (N=5,410), what % have one or more of these conditions?



Among people with condition (row), what percent also have condition (column)?

	Severe menstrual pain and/or very heavy periods	Thyroid disorder	Polycystic ovary syndrome	Endometriosis	Total population
Severe menstrual pain /very heavy periods		18.6%	11.8%	11.8%	1239
Thyroid disorder	28.6%		13.0%	9.5%	809
Polycystic ovary syndrome	29.4%	21.1%		13.5%	497
Endometriosis	35.3%	18.6%	16.2%		414

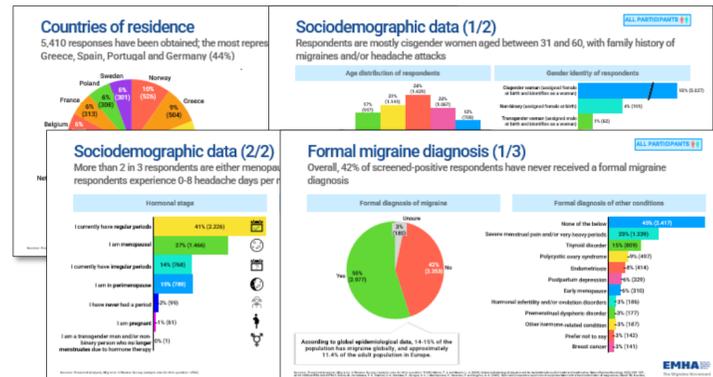
Within this survey, 35.3% of women with endometriosis, 29.4% of women with PCOS and 28.6% of women with thyroid disorder also have severe menstrual pain.

# Table of contents for this document

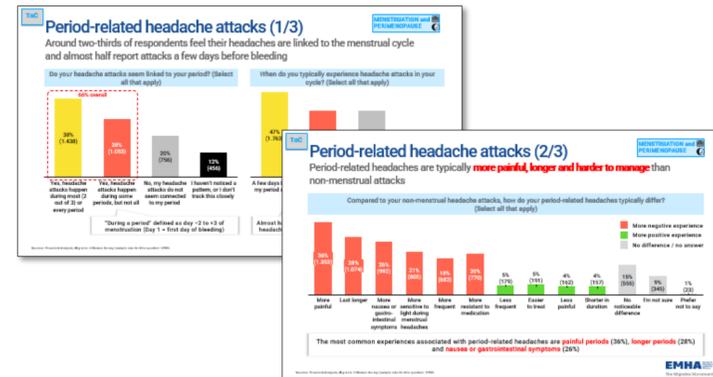
This report mirrors the survey's structure for clarity

Click on any of the below headers to go to the relevant section

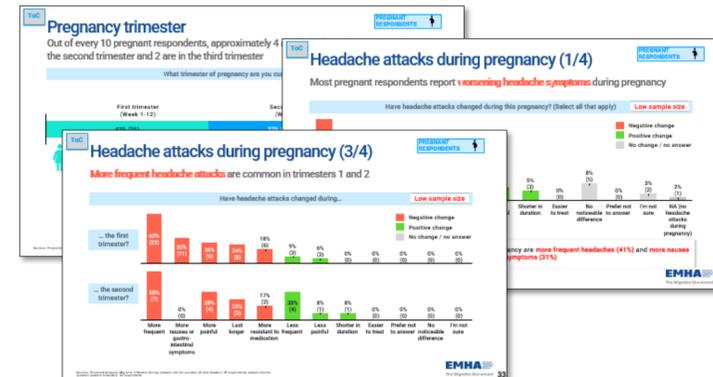
## Demographics and eligibility



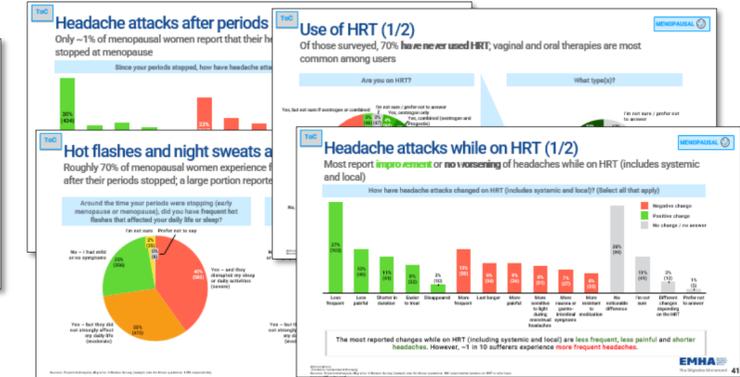
## Menstruation and/or perimenopause



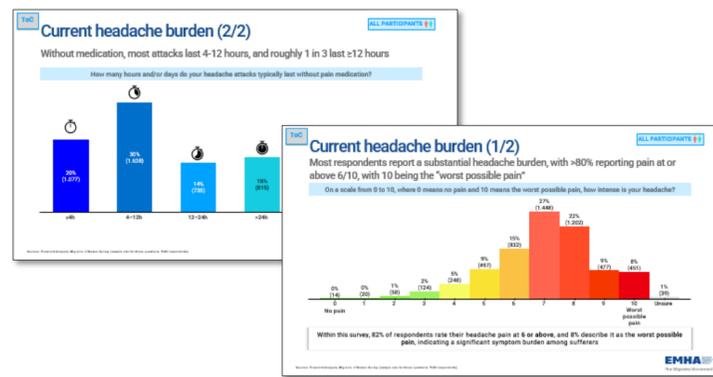
## Migraine during pregnancy



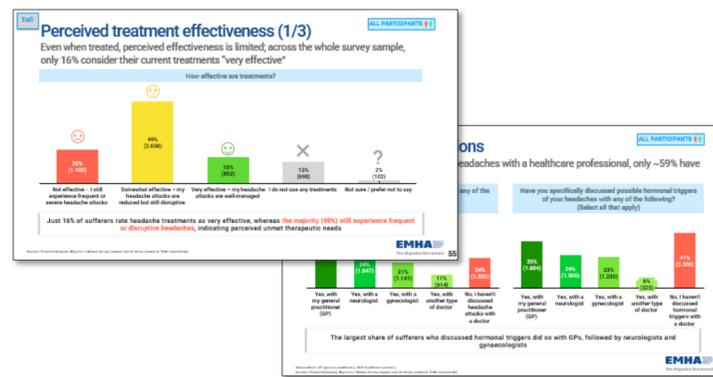
## Menopausal



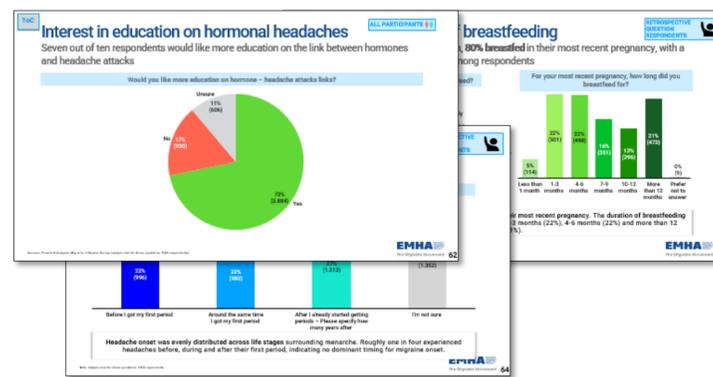
## Trans men and women on hormone therapy



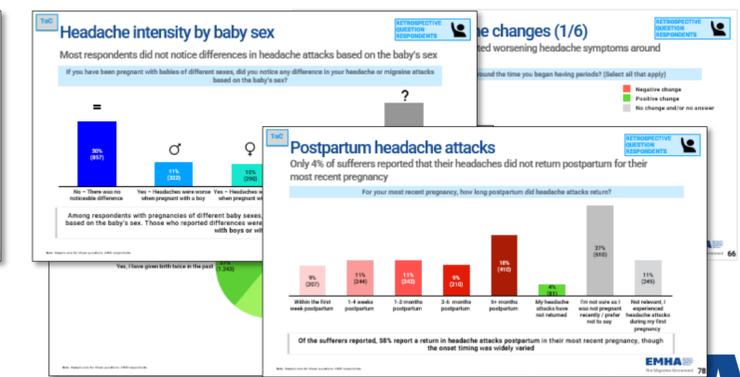
## Therapy-specific questions



## Impact and awareness



## Retrospective questions

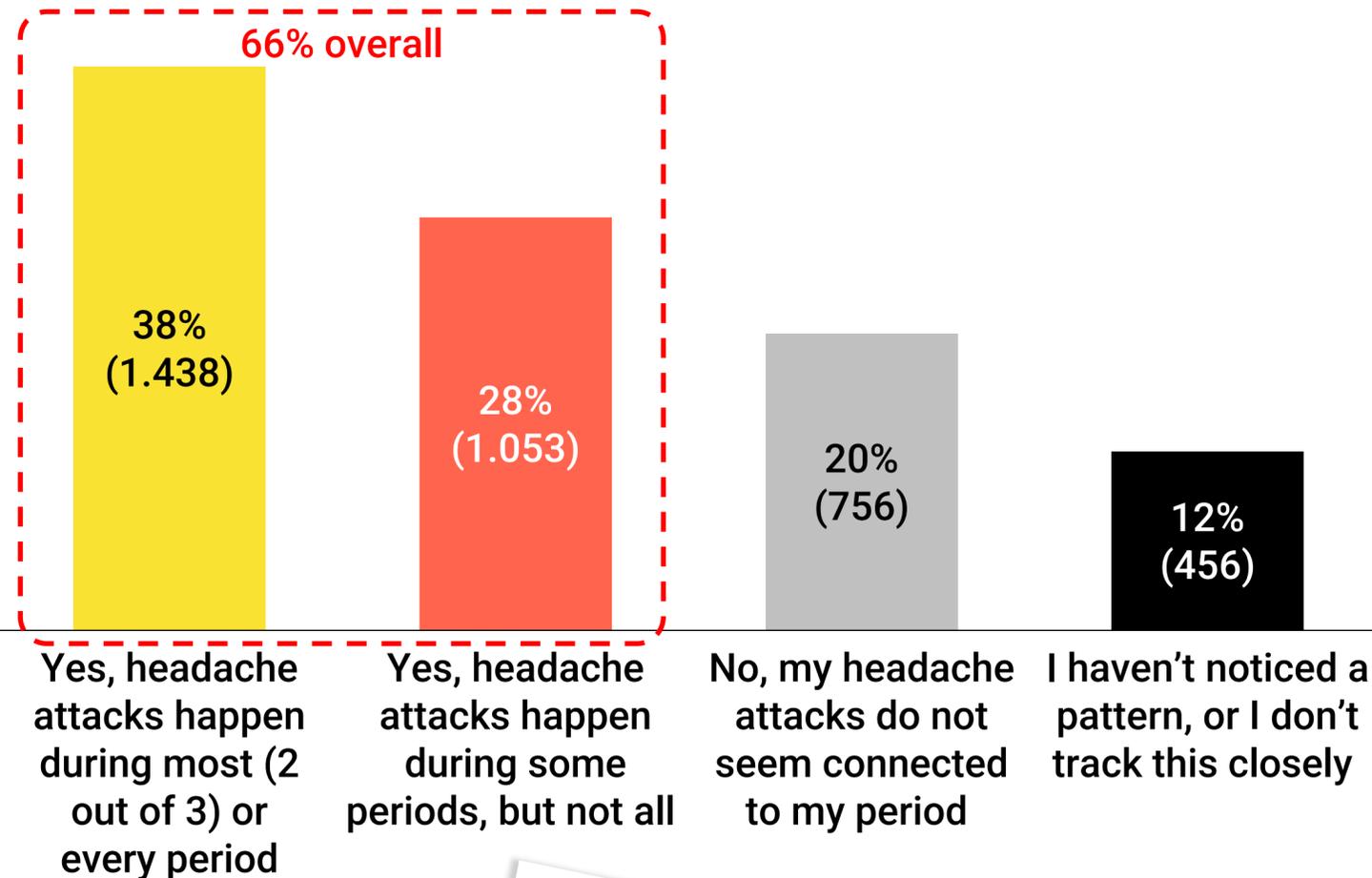


## 2. Menstruation and/or Perimenopause

# Period-related headache attacks (1/3)

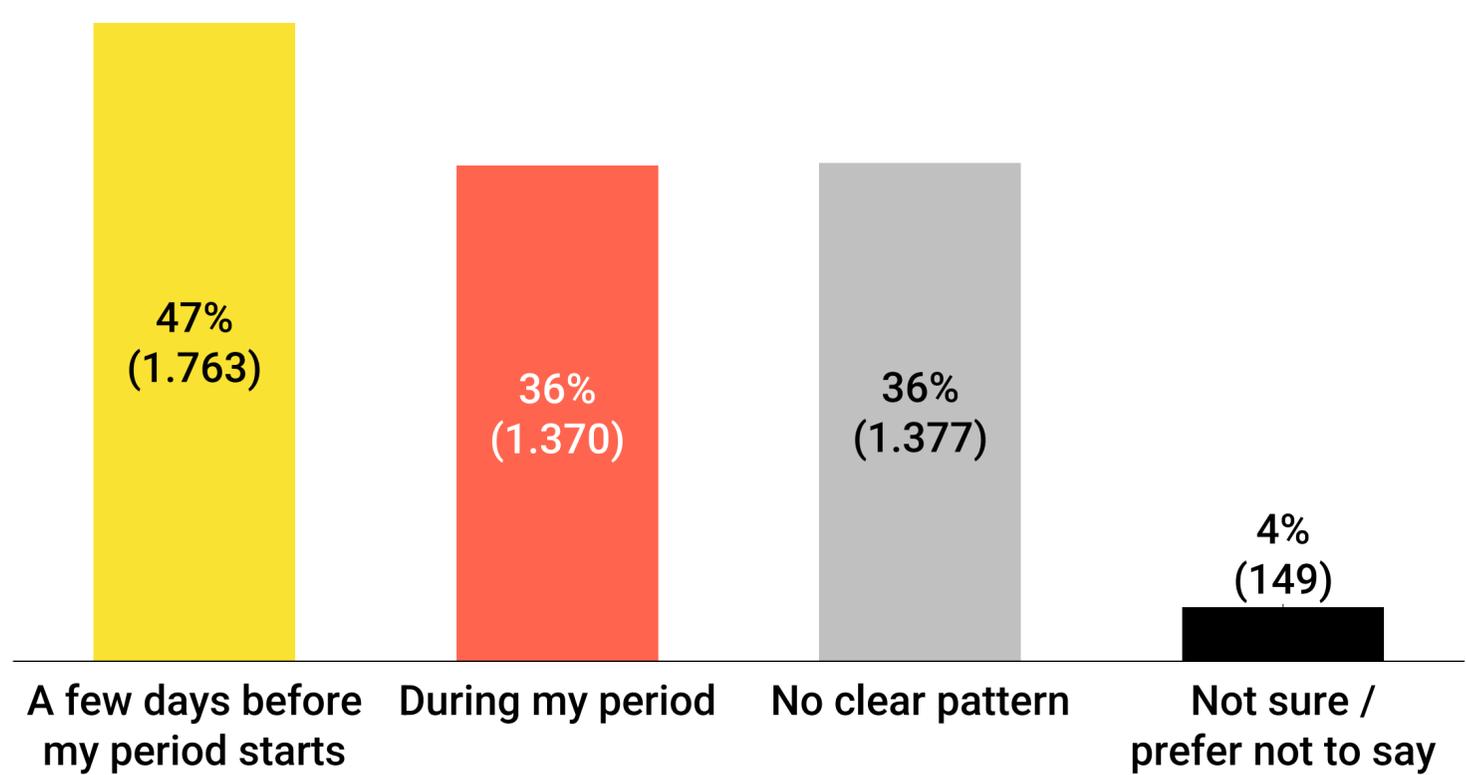
Around two-thirds of respondents feel their headaches are linked to the menstrual cycle and almost half report attacks a few days before bleeding

Do your headache attacks seem linked to your period? (Select all that apply)



"During a period" defined as day -2 to +3 of menstruation (Day 1 = first day of bleeding)

When do you typically experience headache attacks in your cycle? (Select all that apply)



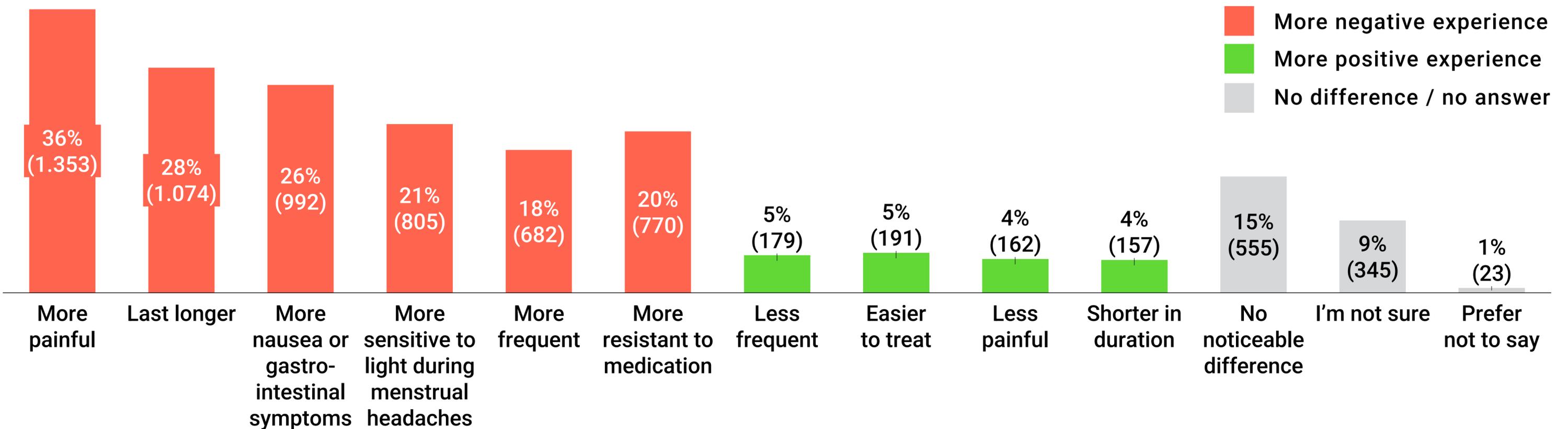
Almost half of respondents report typically experiencing headache attacks a few days before their period starts

Sources: Prescient Analysis, Migraine in Women Survey (sample size for this question: 3,783).

# Period-related headache attacks (2/3)

Period-related headaches are typically **more painful, longer and harder to manage** than non-menstrual attacks

Compared to your non-menstrual headache attacks, how do your period-related headaches typically differ?  
(Select all that apply)



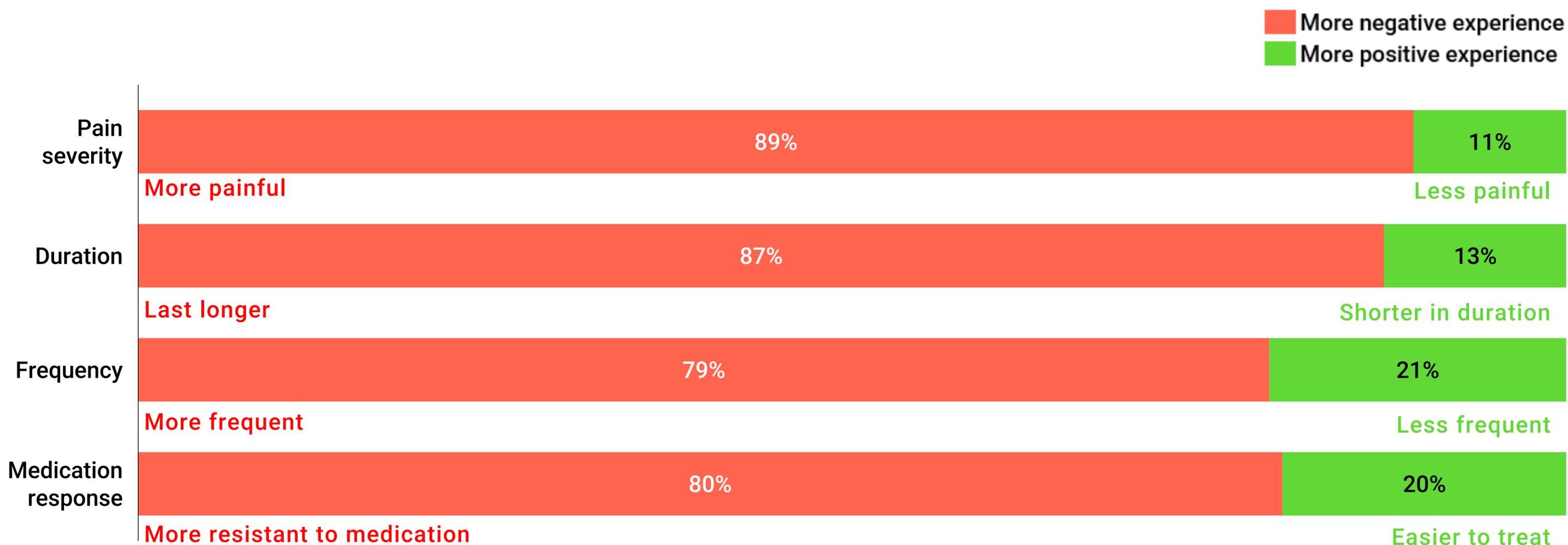
The most common experiences associated with period-related headaches are **painful periods** (36%), **longer periods** (28%) and **nausea or gastrointestinal symptoms** (26%)



# Period-related headache attacks (3/3)

Of those respondents who commented on pain severity and duration, ~90% said their period-related headaches are **more painful and/or longer lasting**

Compared to your non-menstrual headache attacks, how do your period-related headaches typically differ?  
(Select all that apply)

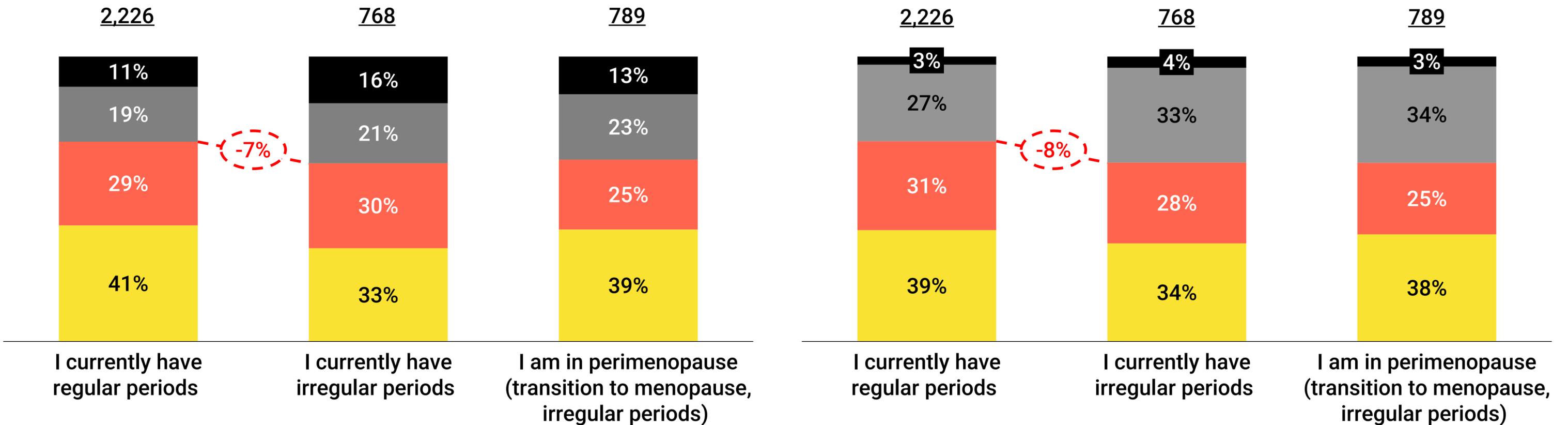


# Period-related headache attacks by stage (1/4)

Although largely consistent across groups, headache-period linkage weakens slightly with hormonal irregularity

Do your headache attacks seem linked to your period? (Select all that apply)

When do you typically experience headache attacks in your cycle? (Select all that apply)



- I haven't noticed a pattern, or I don't track this closely
- No, my Headache attacks do not seem connected to my period
- Yes, headache attacks happen during some periods, but not all
- Yes, headache attacks happen during most (2 out of 3) or every period

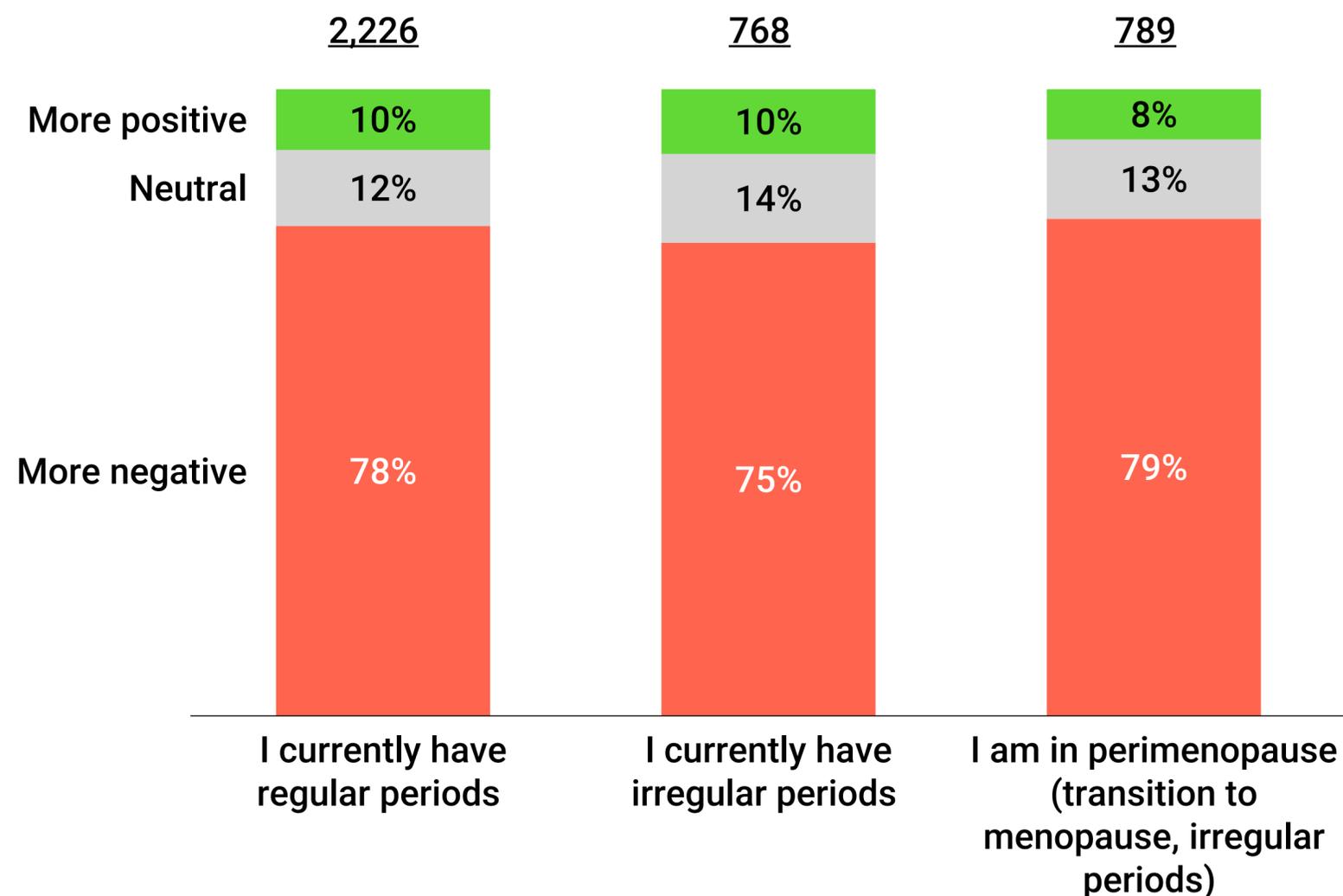
- Not sure / prefer not to say
- No clear pattern
- During my period
- A few days before my period starts

Note: "During a period" is defined as Day -2 to +3 of menstruation, where Day 1 is the first day of bleeding, This question allowed respondents to select multiple answers (Select all that apply). To enable comparison across groups, responses were aggregated into broader categories representing overall trends within each population segment. Percentages are therefore based on the total number of answers within each segment rather than unique respondents. Sources: Prescient Analysis, Migraine in Women Survey (sample size for this question: 3,783).

# Period-related headache attacks by stage (2/4)

Across all menstrual stages, women report their period-related headaches as a **more negative experience** than non-menstrual ones

Compared to your non-menstrual headache attacks, how do your period-related headaches typically differ?  
(Select all that apply)



## Explanation of chart and question logic

Because this was a **multiple-choice (Select all that apply)** question, respondents could choose several options from the following:

More painful Last longer More nausea or gastrointestinal symptoms More sensitive to light during menstrual headaches More frequent More resistant to medication	Less frequent Easier to treat Less painful Shorter in duration	No noticeable difference I'm not sure and/or prefer not to say
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To facilitate comparison across groups, we **aggregated responses into three experience categories**:

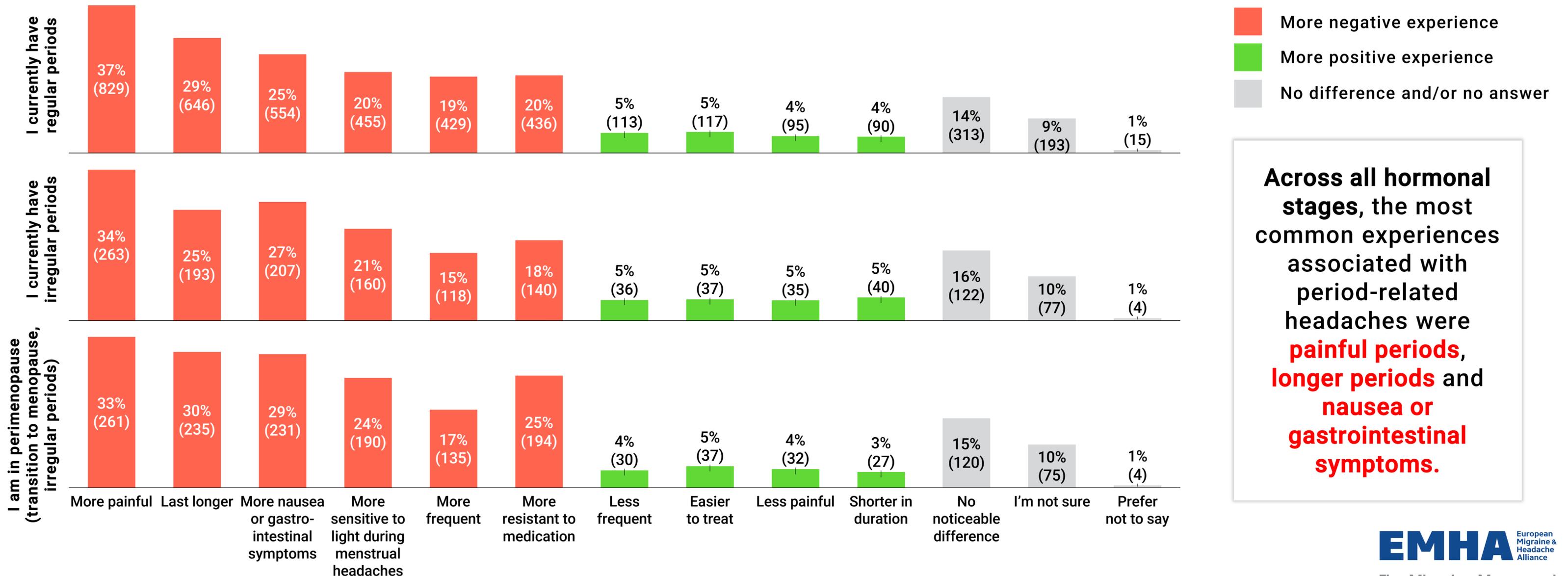
- **More negative experience** (any of the first six options)
- **More positive experience** (any of the next four options)
- **Neutral and/or no noticeable difference** (the final two options)

This aggregation allows us to **compare overall trends** between women with **regular, irregular and perimenopausal cycles**, even though individuals could select more than one response

# Period-related headache attacks by stage (3/4)

Period-related headaches are **more painful, longer** and **harder to manage**, regardless of whether participants have regular periods, irregular periods and are in perimenopause

(By hormonal stage) compared to your non-menstrual headache attacks, how do your period-related headaches typically differ?  
(Select all that apply)



**Across all hormonal stages, the most common experiences associated with period-related headaches were **painful periods, longer periods** and **nausea or gastrointestinal symptoms.****

Sources: Prescient Analysis, Migraine in Women Survey (sample size for participants with regular periods: 2,226; participants with irregular periods: 768; participants in perimenopause: 789).

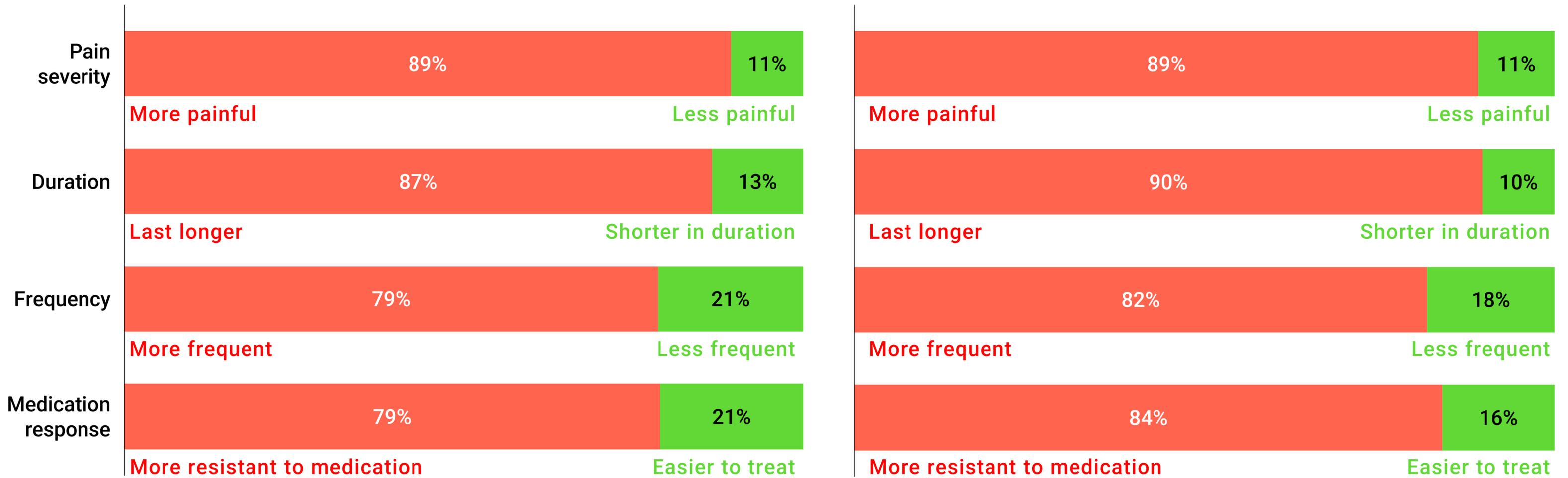
# Period-related headache attacks by stage (4/4)

Across all hormonal stages, ~90% of sufferers who commented on severity indicated their period-related headaches are **more painful** than non-menstrual attacks

(By hormonal stage) compared to your non-menstrual headache attacks, how do your period-related headaches typically differ?

## Women who menstruate

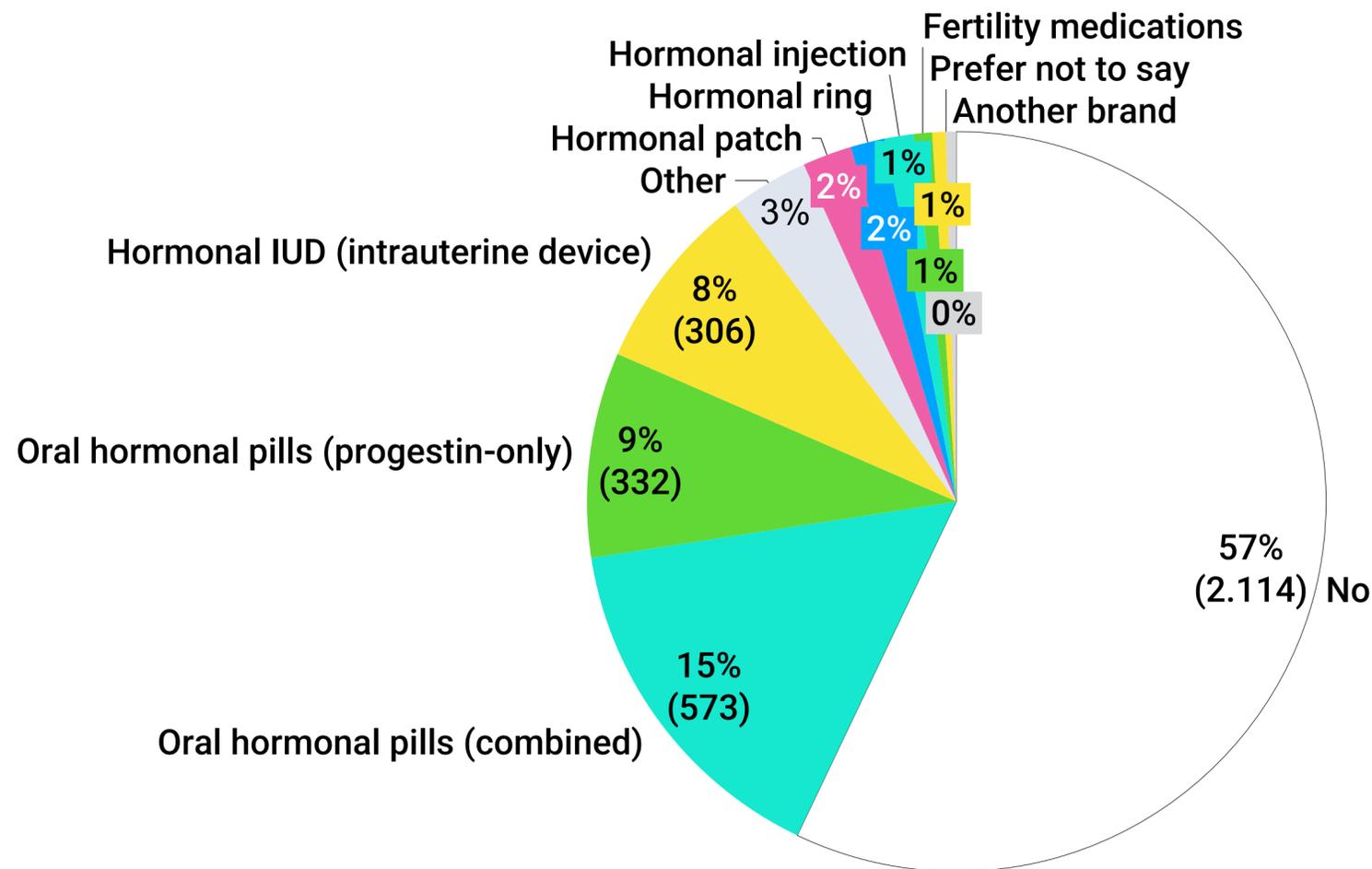
## Women in perimenopause (transition to menopause)



# Hormonal treatment and/or contraceptives

Most respondents are not using hormonal therapy and/or contraceptives; among users, oral pills (combined and progestin-only) and IUDs are most common

Do you use hormonal treatment?



Examples mentioned

Category	Examples Mentioned
Hormonal IUD	Mirena, Implanon, hormonal/contraceptive implant
Oral hormonal pills (progestin-only)	Minipill, Famenita, Progevera
Oral hormonal pills (combined)	Combined pill, Mikropille, Drospirenone
Hormonal patch	Oestrogen or combined hormone patches
Other	Hormone replacement therapy (HRT) Femoston, Androcur + Estreva, bioidentical hormones
	Non-reproductive hormones Thyroid medications (Eutirox, Thyrex), growth hormone
	Topical oestrogen and/or progesterone Estrogel, Lenzetto spray, progesterone cream
Discontinued or none	"Stopped two months ago", "none", "after hysterectomy"

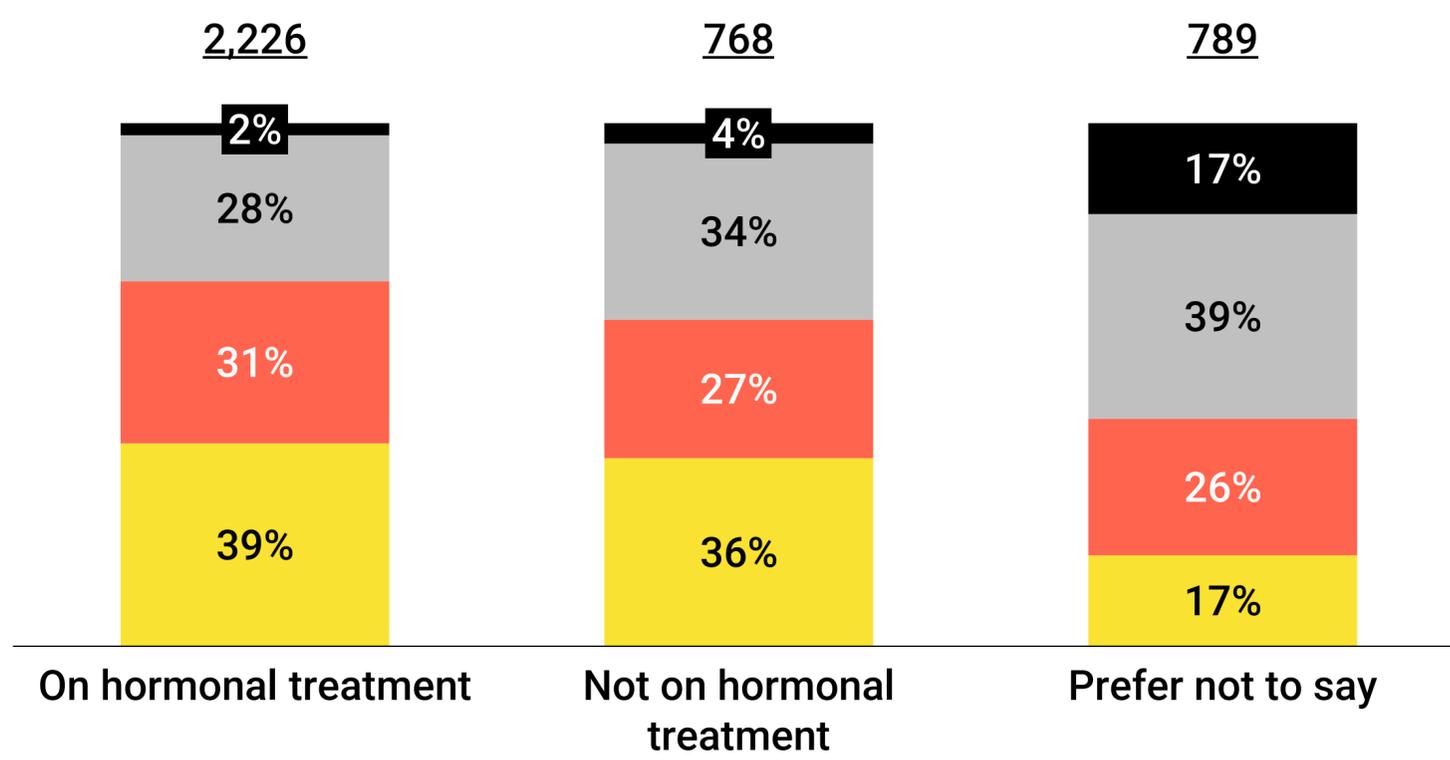
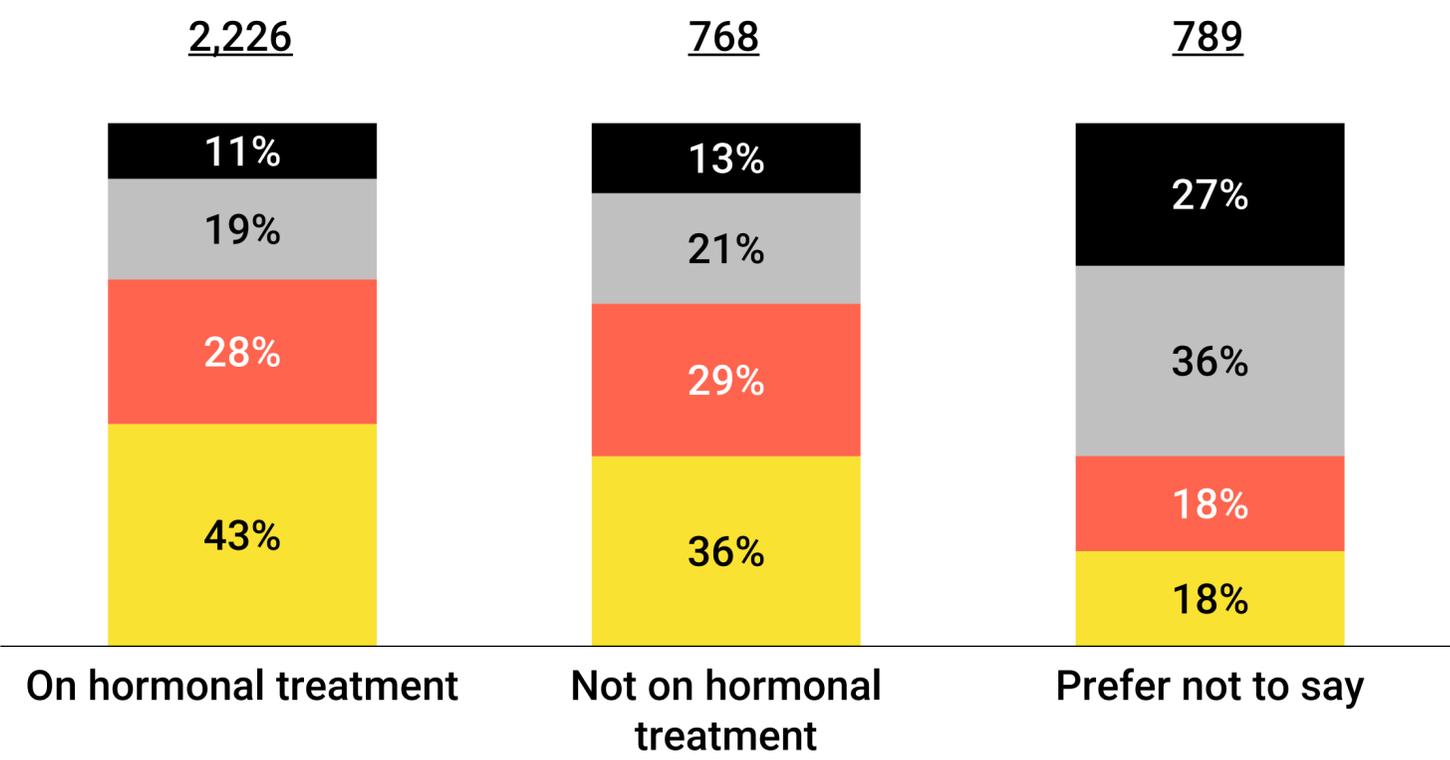
Most respondents (57%) do not use hormonal treatment. Among those who do, the most used treatments are **combined oral hormonal pills (15%), progestin-only oral hormonal pills (9%) and hormonal IUDs (8%)**

# Headache attacks on contraceptives (1/3)

Women using hormonal contraception slightly more often report a perceived link between headaches and bleeding/cycle timing

Do your headache attacks seem linked to your period? (Select all that apply)

When do you typically experience headache attacks in your cycle? (Select all that apply)



- Yes, headache attacks happen during most (2 out of 3) or every period
- Yes, headache attacks happen during some periods, but not all
- No, my Headache attacks do not seem connected to my period
- I haven't noticed a pattern, or I don't track this closely

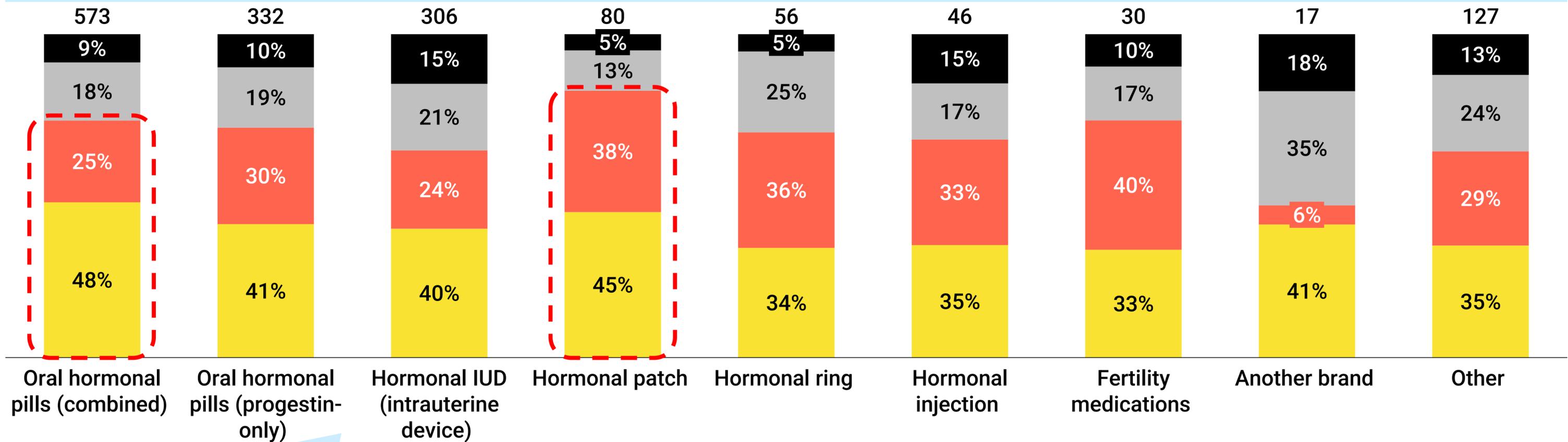
- A few days before my period starts
- During my period
- No clear pattern
- Not sure / prefer not to say

Note: "During a period" is defined as Day -2 to +3 of menstruation, where Day 1 is the first day of bleeding. This question allowed respondents to select multiple answers (Select all that apply). To enable comparison across groups, responses were aggregated into broader categories representing overall trends within each population segment. Percentages are therefore based on the total number of answers within each segment rather than unique respondents. Sources: Prescient Analysis, Migraine in Women Survey (sample size for this question: 3,783).

# Headache attacks on contraceptives (2/3)

Reported headache–bleeding patterns appear broadly similar across methods

When do you typically experience headache attacks in your cycle? (Select all that apply)



**Note:** In users of hormonal contraception that suppresses/irregularizes bleeding (e.g., hormonal IUD, progestin-only pill), 'period' may reflect breakthrough bleeding or perceived timing rather than cyclic menstruation

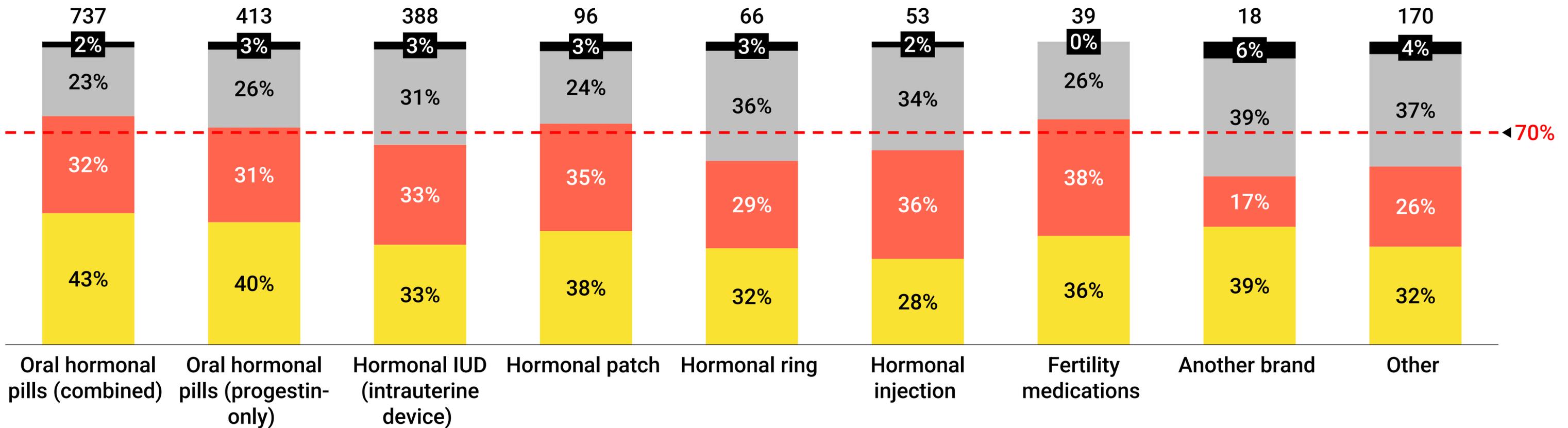
- Yes, headache attacks happen during most (2 out of 3) or every period
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# Headache attacks on contraceptives (3/3)

Among respondents reporting a bleeding window, ~7 in 10 users report attacks around their perceived bleeding window

When do you typically experience headache attacks in your cycle? (Select all that apply)



**Note:** In users of hormonal contraception that suppresses/irregularizes bleeding (e.g., hormonal IUD, progestin-only pill), 'period' may reflect breakthrough bleeding or perceived timing rather than cyclic menstruation

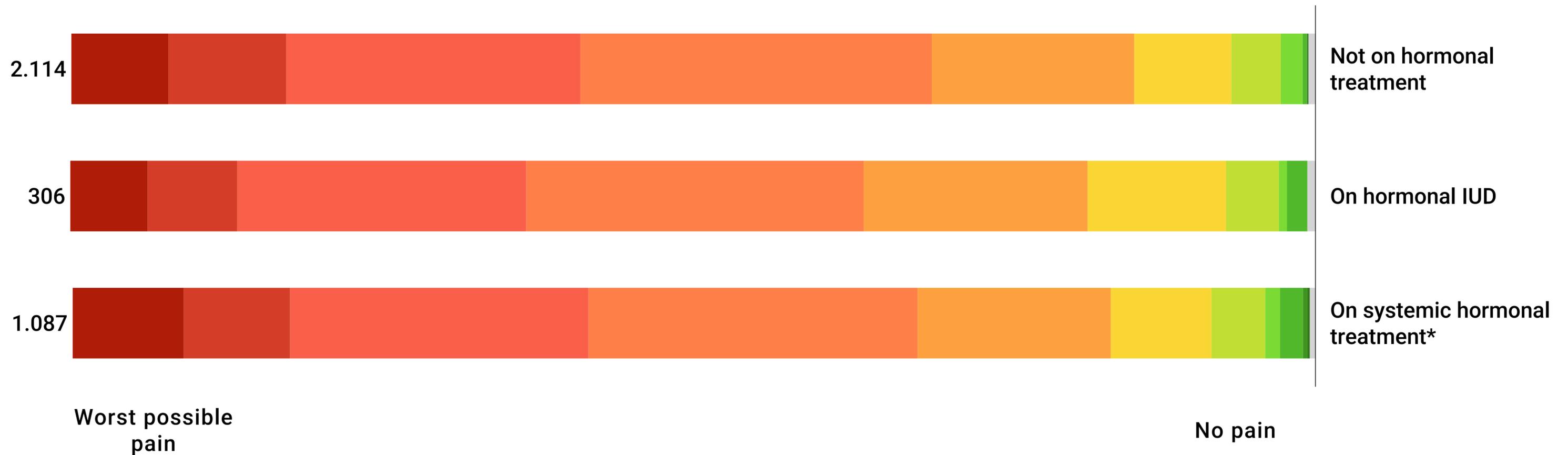
- A few days before my period starts
- During my period
- No clear pattern
- Not sure / prefer not to say

Note: "During a period" is defined as Day -2 to +3 of menstruation, where Day 1 is the first day of bleeding. This question allowed respondents to select multiple answers (Select all that apply). To enable comparison across groups, responses were aggregated into broader categories representing overall trends within each population segment. Percentages are therefore based on the total number of answers within each segment rather than unique respondents. Sources: Prescient Analysis, Migraine in Women Survey (sample size for this question: 3,783).

# Headache burden on contraceptives

There are no major differences between those not on hormonal treatment vs. those on local or systemic hormonal treatment; most are in the moderate-severe range

On a scale from 0 to 10, where 0 means no pain and 10 means the worst possible pain, how intense is your headache?



**Headache intensity remains high regardless of contraceptive status/type; IUD users show a small shift toward lower intensity (~1/3 in the 8-10 range vs. ~40% for the other groups)**

Includes oral hormonal pills (combined), oral hormonal pills (progestin-only), hormonal patch, hormonal ring, and hormonal injection  
 Abbreviations: IUD (Intrauterine Device)  
 Sources: Prescient Analysis, Migraine in Women Survey (sample size for this question & filters: 3,783).

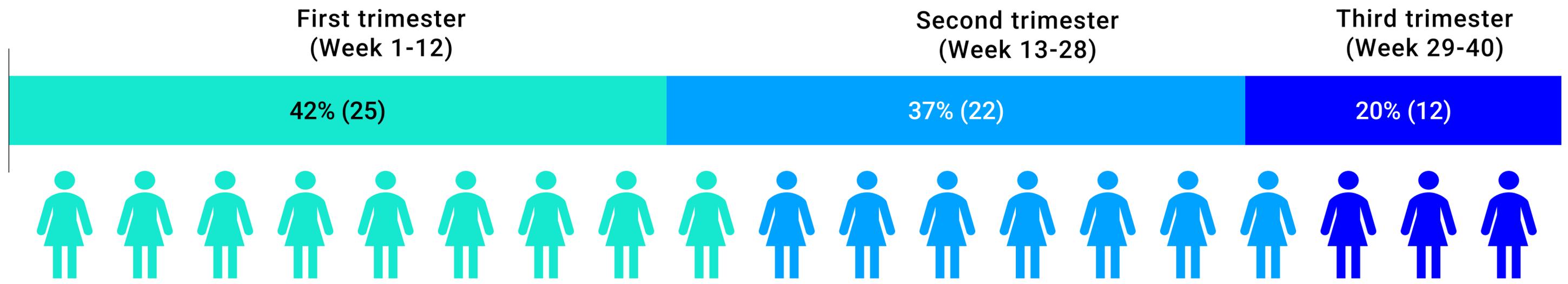


# 3. Migraine During Pregnancy

# Pregnancy trimester

Out of every 10 pregnant respondents, approximately 4 are in the first trimester, 4 are in the second trimester and 2 are in the third trimester

What trimester of pregnancy are you currently in? Low sample size



Sources: Prescient Analysis, Migraine in Women Survey (sample size for these questions: 59 respondents).

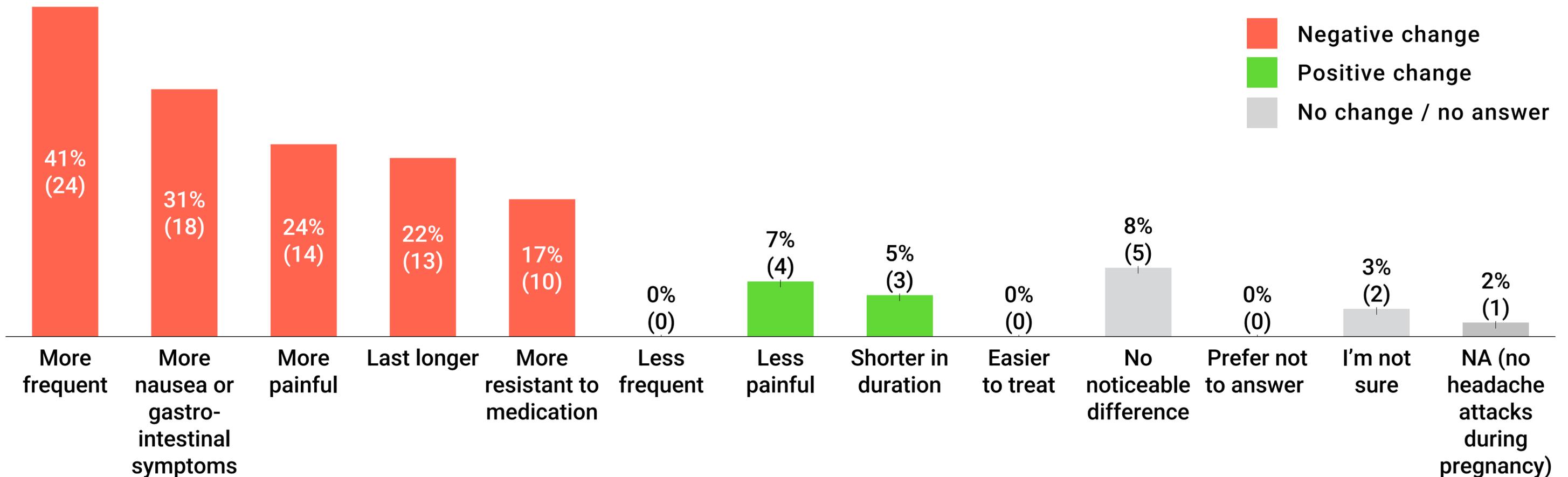


# Headache attacks during pregnancy (1/4)

Most pregnant respondents report **worsening headache symptoms** during pregnancy

Have headache attacks changed during this pregnancy? (Select all that apply)

Low sample size



The most reported changes in headache attacks during pregnancy are **more frequent headaches (41%)** and **more nausea or gastrointestinal symptoms (31%)**

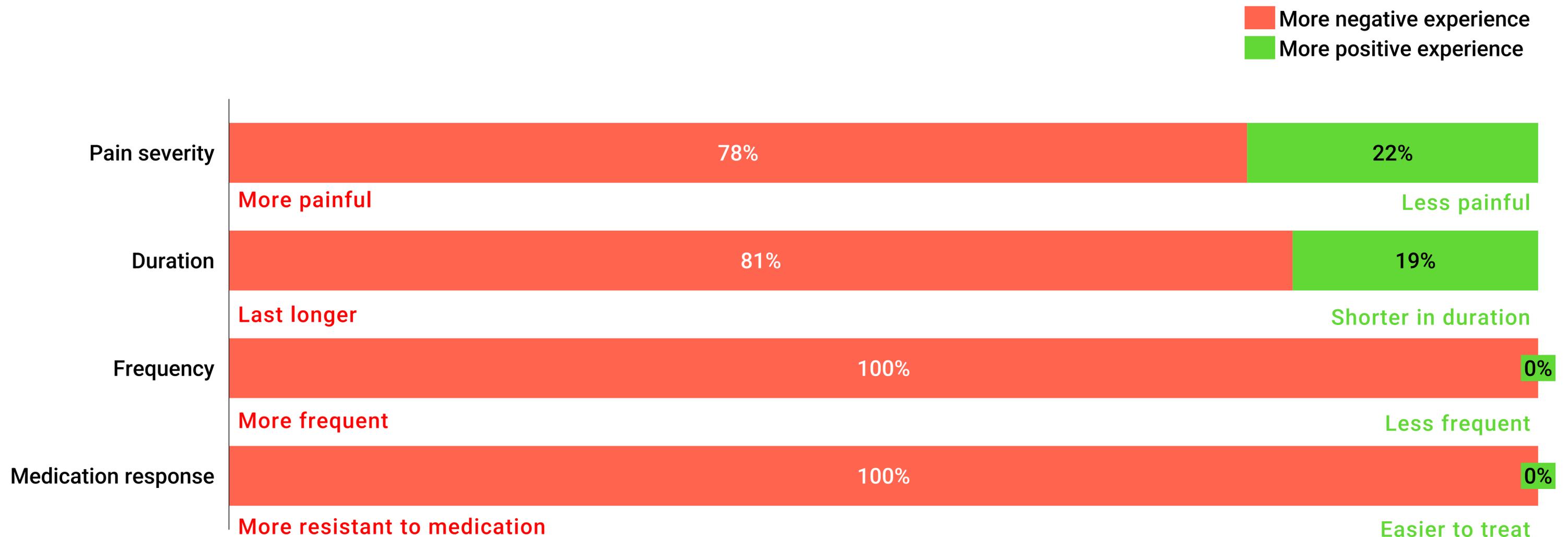


# Headache attacks during pregnancy (2/4)

Of those who commented on frequency and medication, 100% indicated that their pregnancy headaches were typically **more frequent and resistant to medication**

Have headache attacks changed during this pregnancy? (Select all that apply)

Low sample size



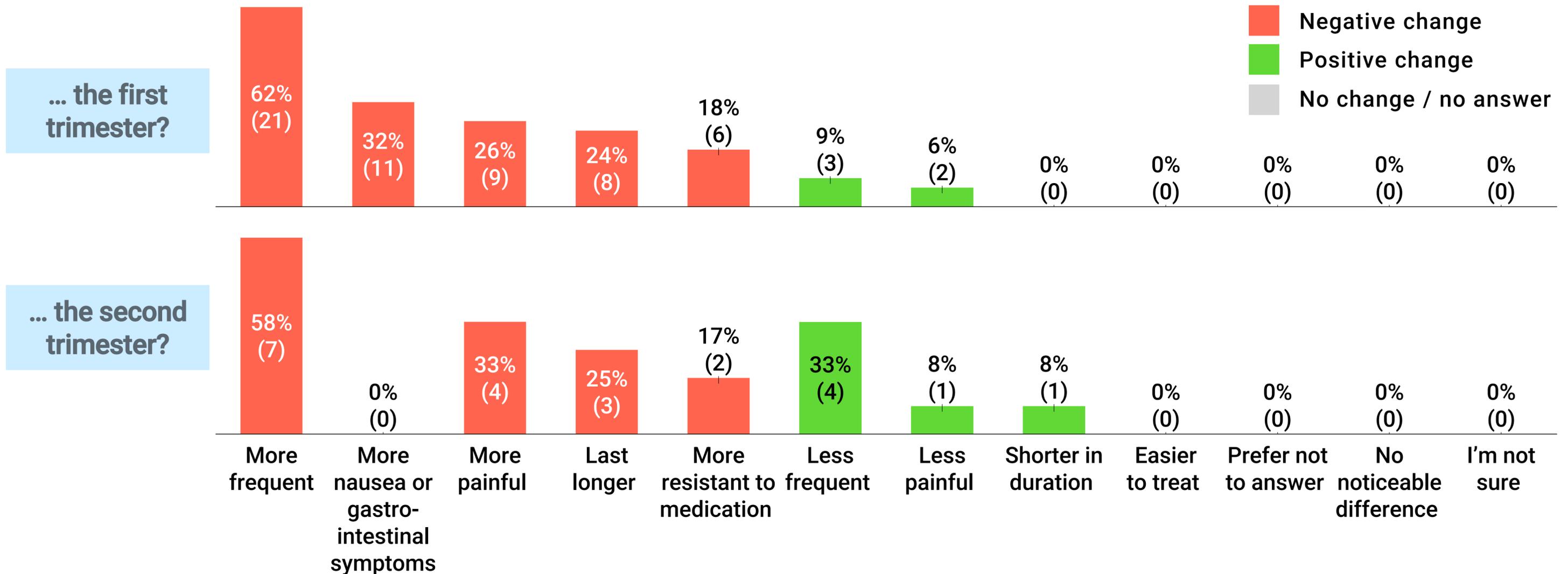


# Headache attacks during pregnancy (3/4)

More frequent headache attacks are common in trimesters 1 and 2

Have headache attacks changed during...

Low sample size



Sources: Prescient Analysis, Migraine in Women Survey (sample size for question (first trimester): 25 respondents; sample size for question (second trimester): 22 respondents).



# Headache attacks during pregnancy (4/4)

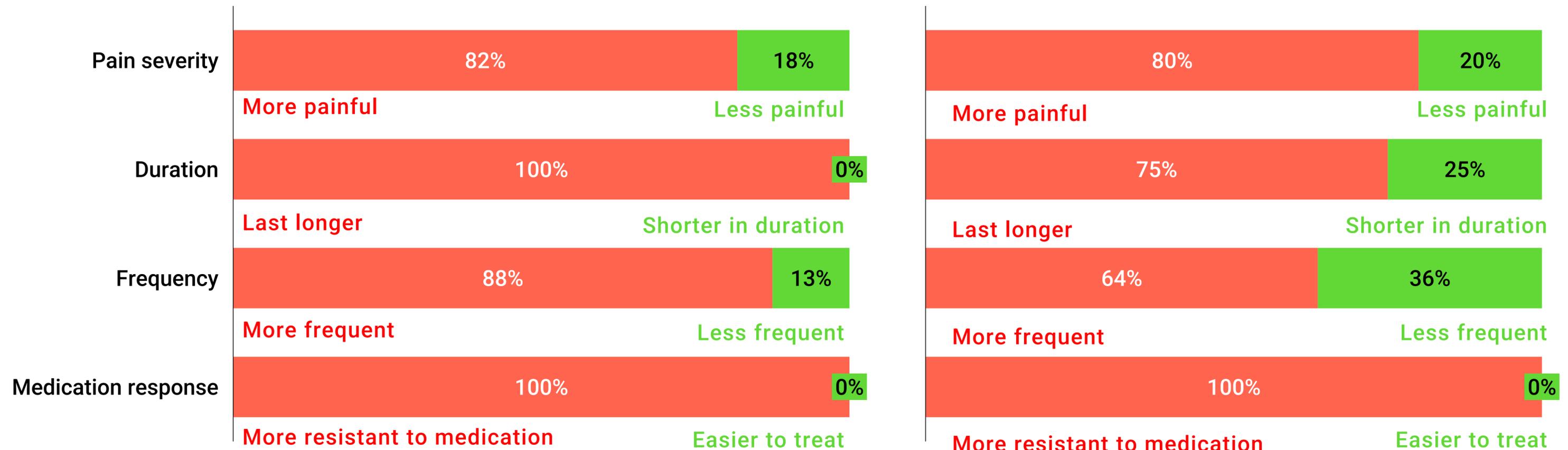
1<sup>st</sup> trimester respondents who reported on duration and frequency reported **longer and more frequent headaches** in higher proportion than 2<sup>nd</sup> trimester respondents

Have headache attacks changed during...

Low sample size

... the first trimester?

... the second trimester?



More negative experience More positive experience

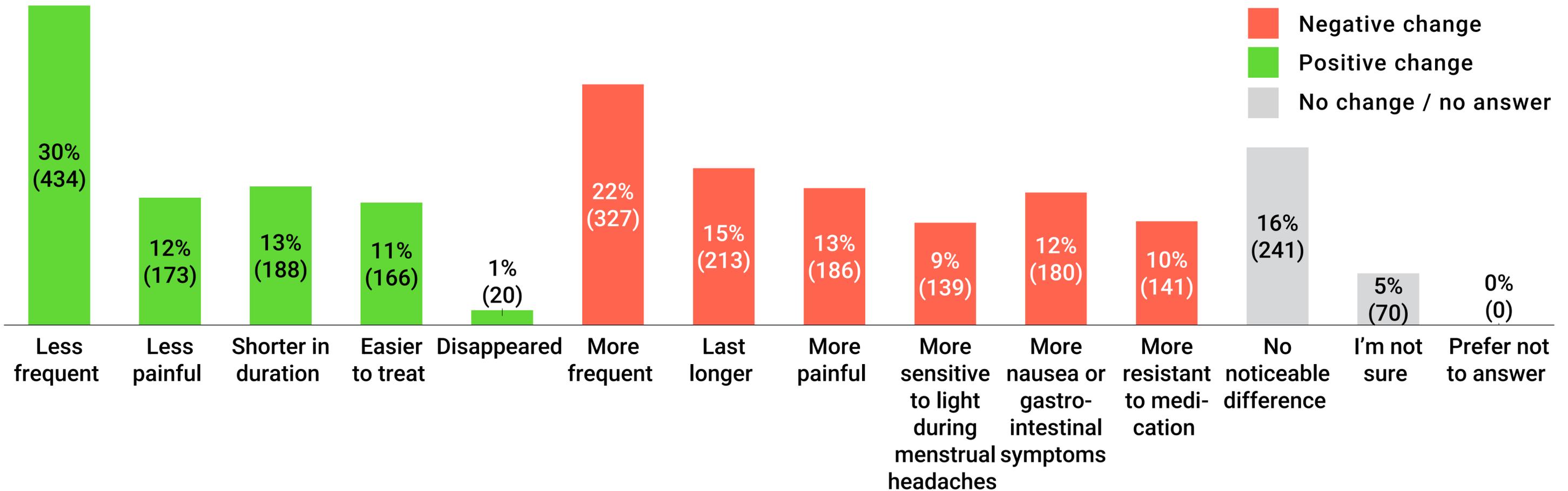
# 4. Menopausal



# Headache attacks after periods stopped (1/2)

Only ~1% of menopausal women report that their headaches disappeared after periods stopped at menopause

Since your periods stopped, how have headache attacks changed? (Select all that apply)



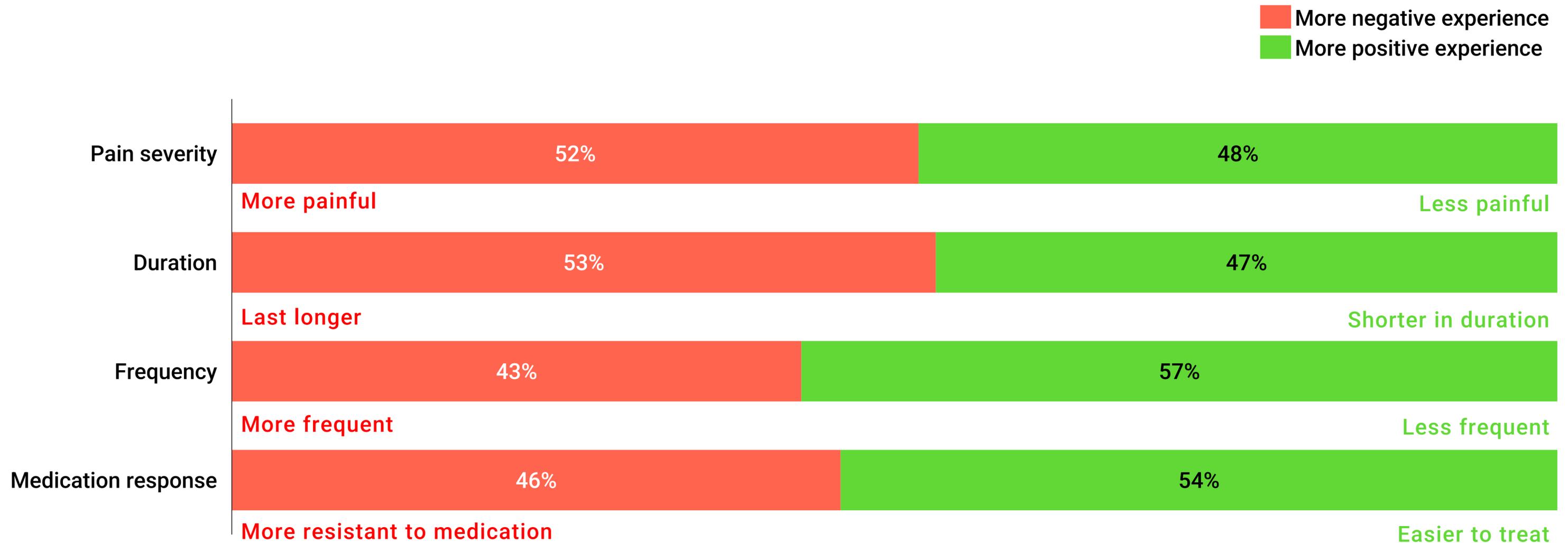
Though approximately one in three menopausal women report **improvement in headache frequency, including lower frequency** after periods stopped, experiences vary widely, with one in five reporting **more frequent headaches**, and 16% noticing no change



# Headache attacks after periods stopped (2/2)

~50% of respondents who reported on pain and duration say that menopausal attacks are **more painful and longer lasting** than those prior to menopause

Since your periods stopped, how have headache attacks changed? (Select all that apply)

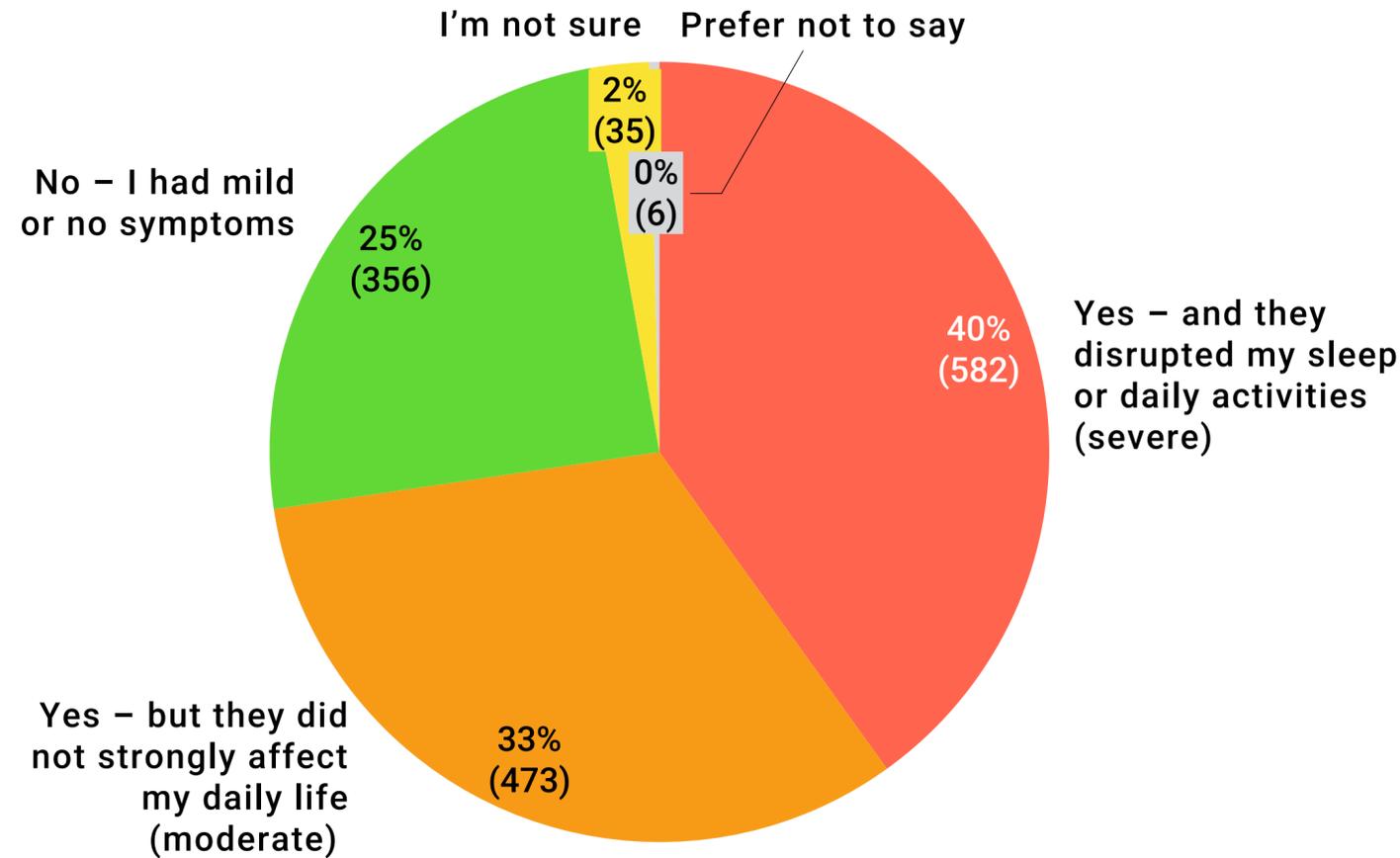




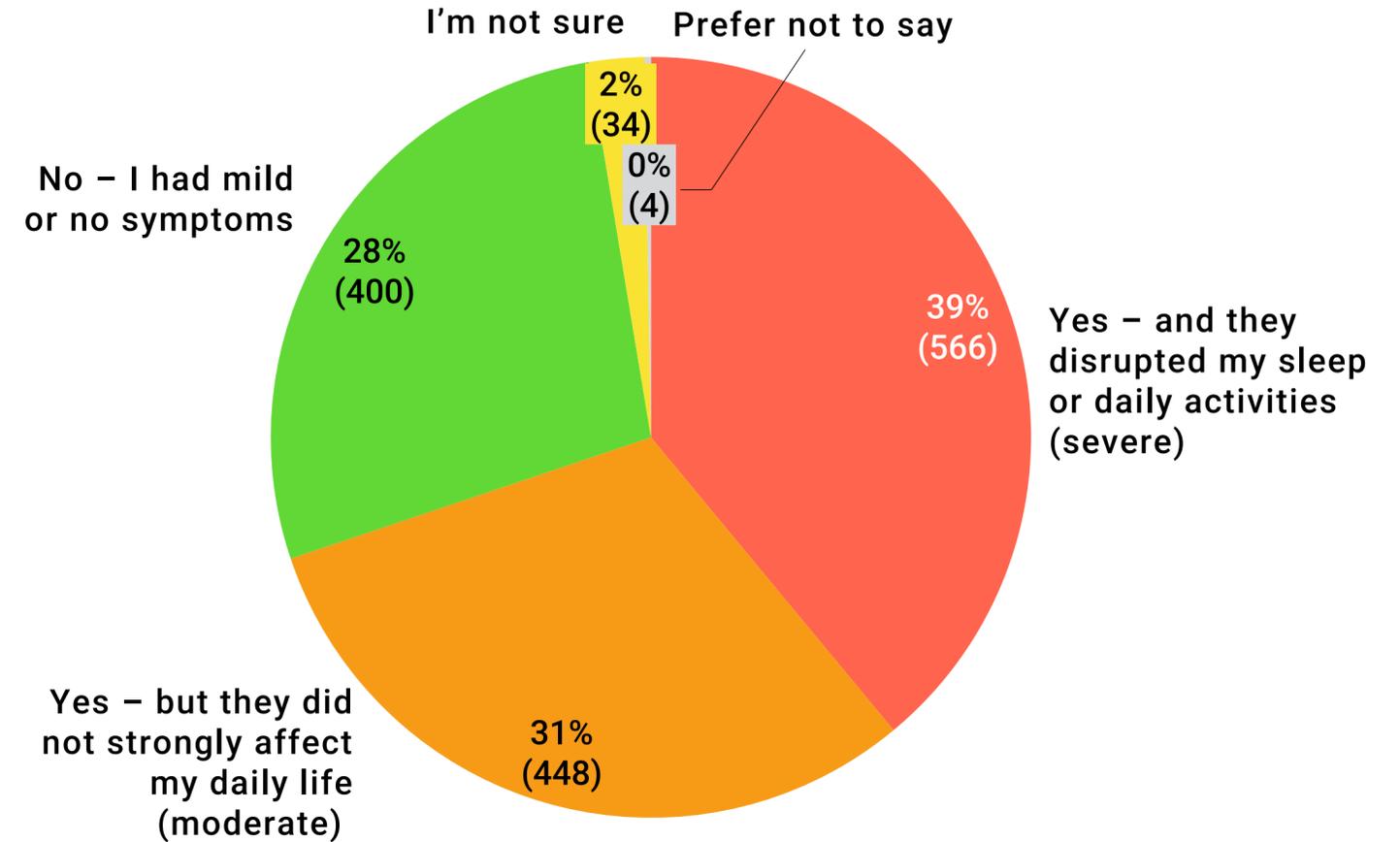
# Hot flashes and night sweats after periods stopped

Roughly 70% of menopausal women experience frequent hot flashes and night sweats after their periods stopped; a large portion reported symptoms impacting their daily life

Around the time your periods were stopping (early menopause or menopause), did you have frequent hot flashes that affected your daily life or sleep?



Around the time your periods were stopping (early menopause or menopause), did you have frequent night sweats that affected your daily life or sleep?

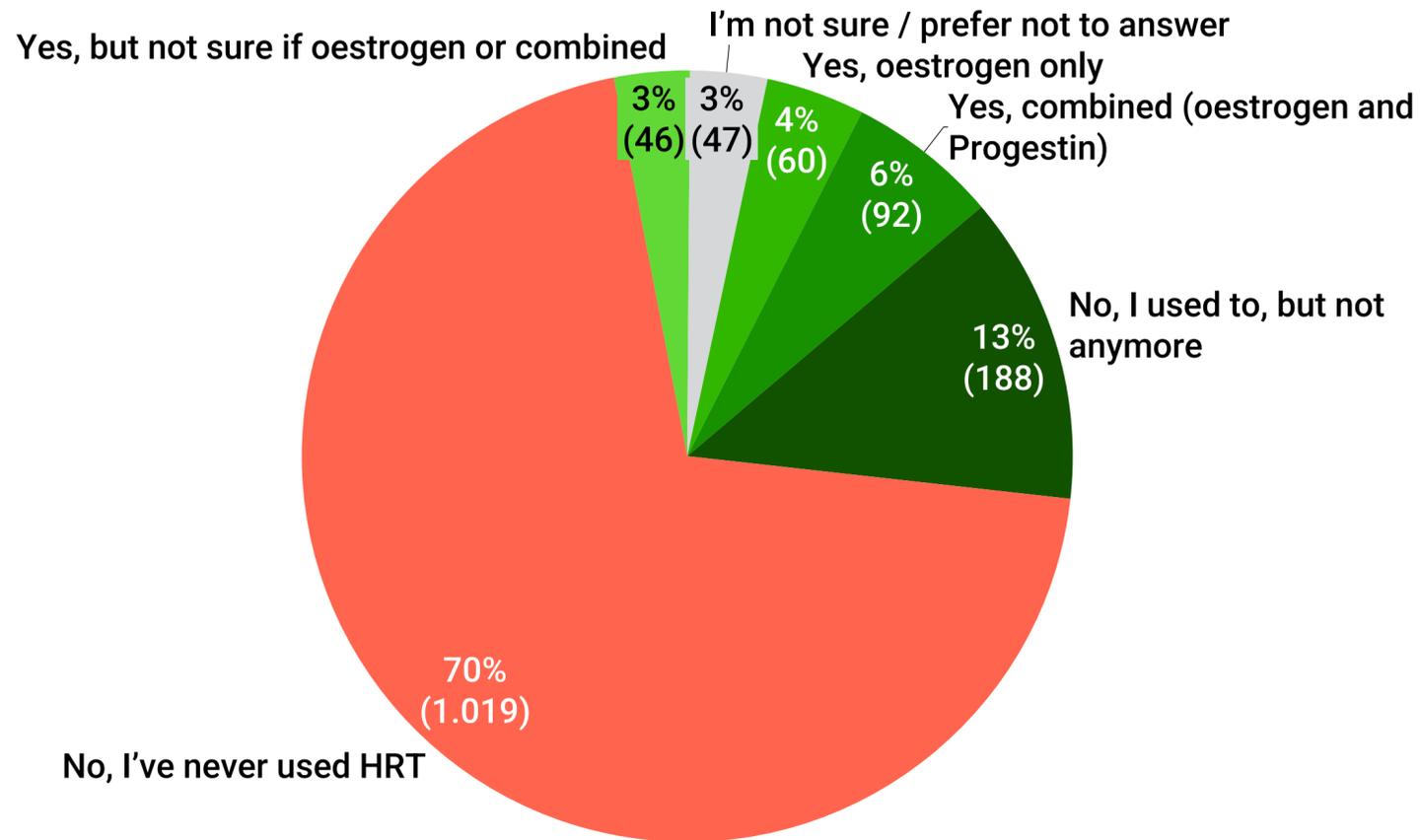


Sources: Prescient Analysis, Migraine in Women Survey (sample size for these questions: 1,452 respondents).

# Use of HRT (1/2)

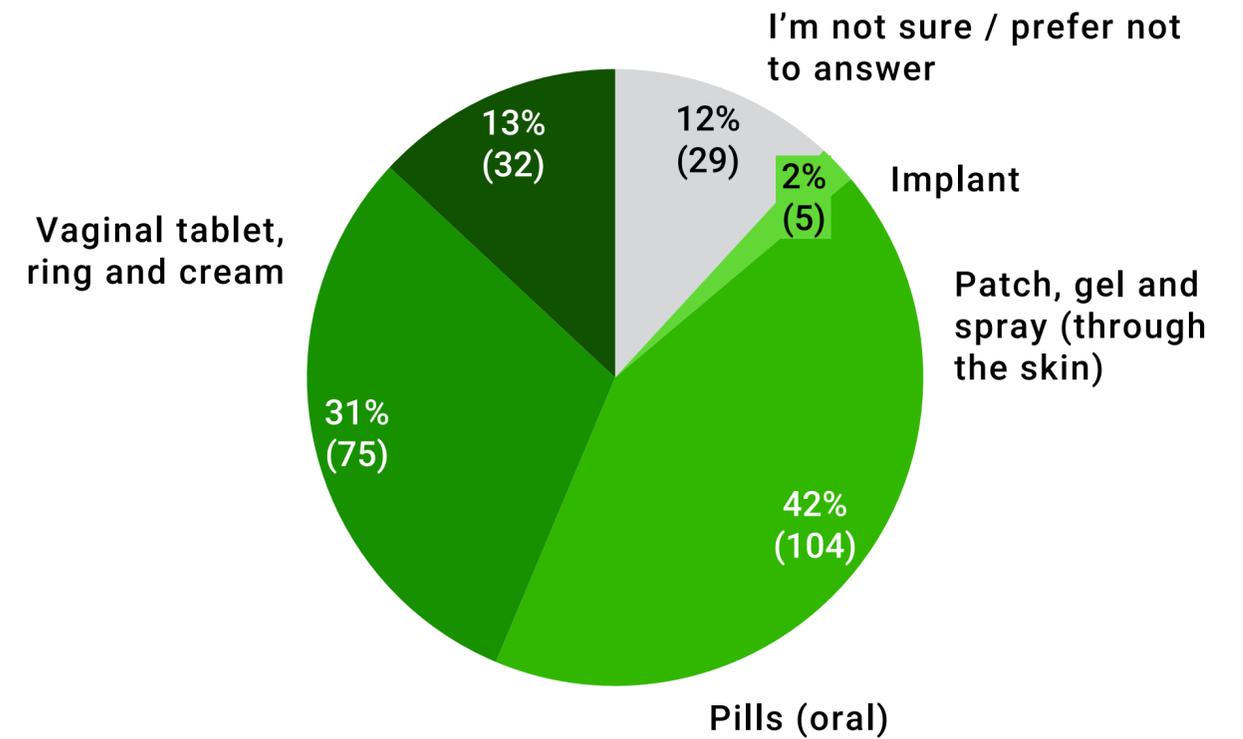
Of those surveyed, 70% have never used HRT; vaginal and oral therapies are most common among users

Are you on HRT?



245 respondents who use and/or used HRT

What type(s)?



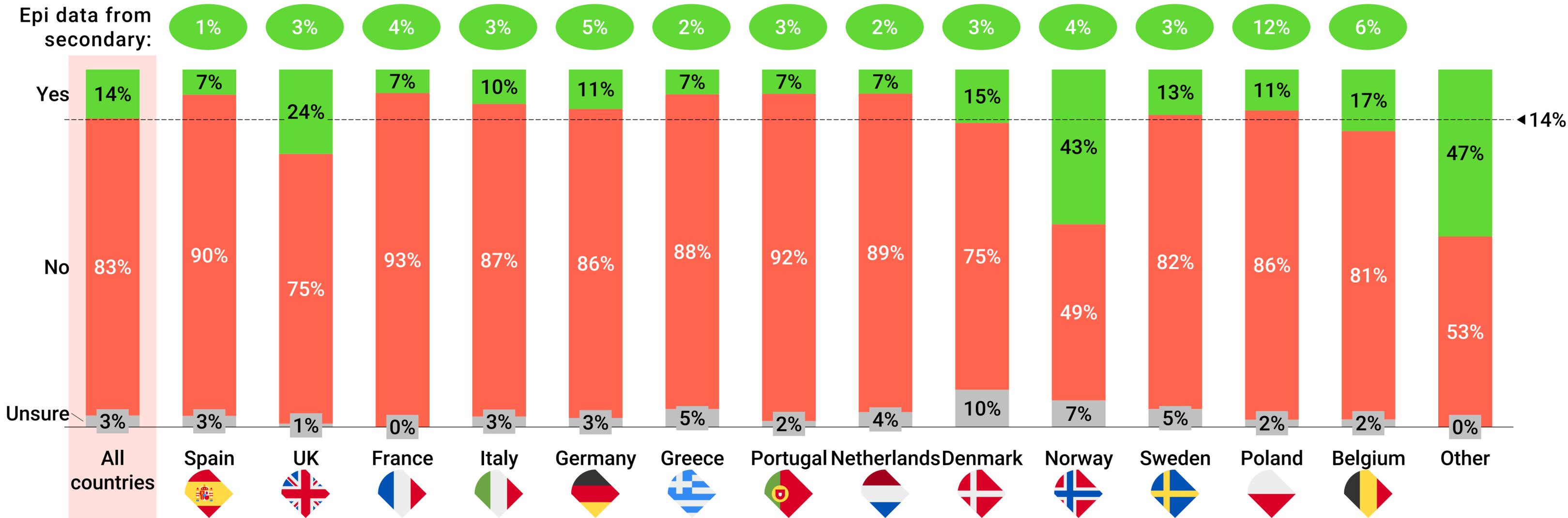
Abbreviations: HRT (hormone replacement therapy).  
Sources: Prescient Analysis, Migraine in Women Survey (sample size (left): 1,452 respondents; sample size (right): 245 respondents).



# Use of HRT (2/2)

Across countries, HRT use remains low (<15%), although there is a marked higher prevalence reported by sufferers from our survey in the UK (24%) and Norway (43%)

Current use of HRT – all countries (our survey) vs. epidemiological data



Abbreviations: HRT (hormone replacement therapy).

Sources: Prescient Analysis, Migraine in Women Survey (sample size (left): 1,452 respondents; sample size (right): 245 respondents), Ameye, Lieveke et al. "Menopausal hormone therapy use in 17 European countries during the last decade." Maturitas vol. 79,3 (2014): 287-91. doi:10.1016/j.maturitas.2014.07.002; Rachoń, Dominik et al. "Knowledge and use of hormone replacement therapy among Polish women: estimates from a nationally representative study--HORTPOL 2002." Maturitas vol. 47,1 (2004): 31-7. doi:10.1016/s0378-5122(03)00222-6

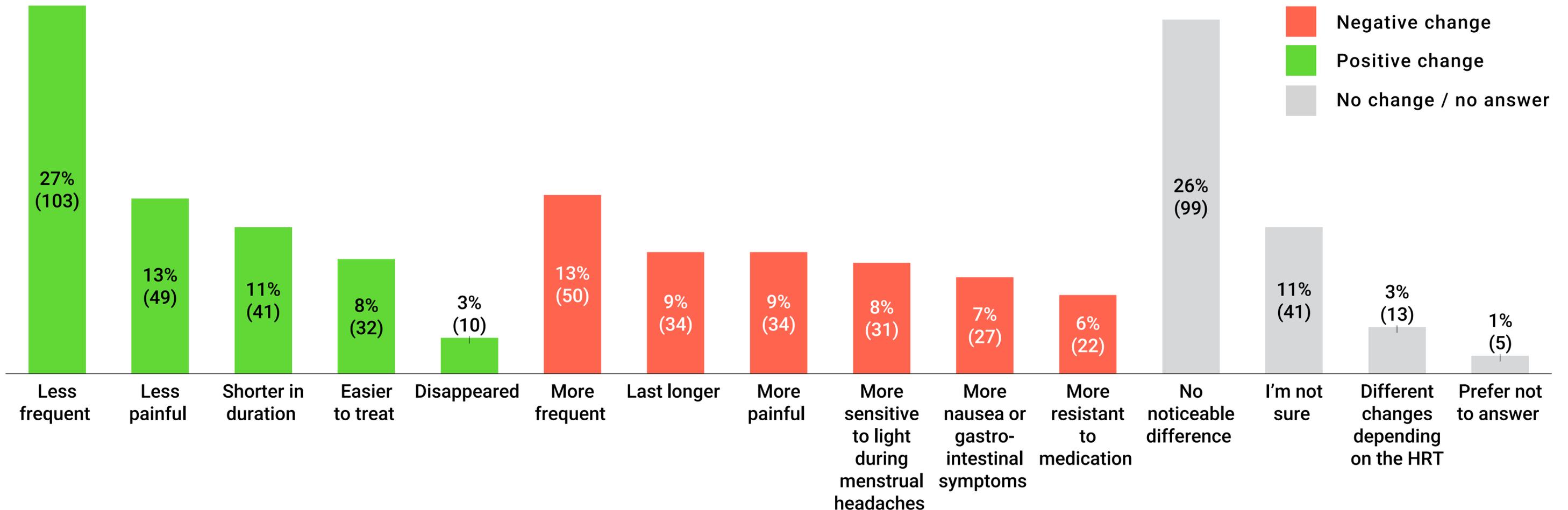
Note: Across all countries except Poland, data were gathered in a single, consistent manner using Ameye, Lieveke et al., 2014. However, in Poland, we used a different study (Dominik et al., 2004), which is subject to differences in design, population, and methodology. We have assumed "unsure" is not applicable across.



# Headache attacks while on HRT (1/2)

Most report **improvement** or no worsening of headaches while on HRT (includes systemic and local)

How have headache attacks changed on HRT (includes systemic and local)? (Select all that apply)



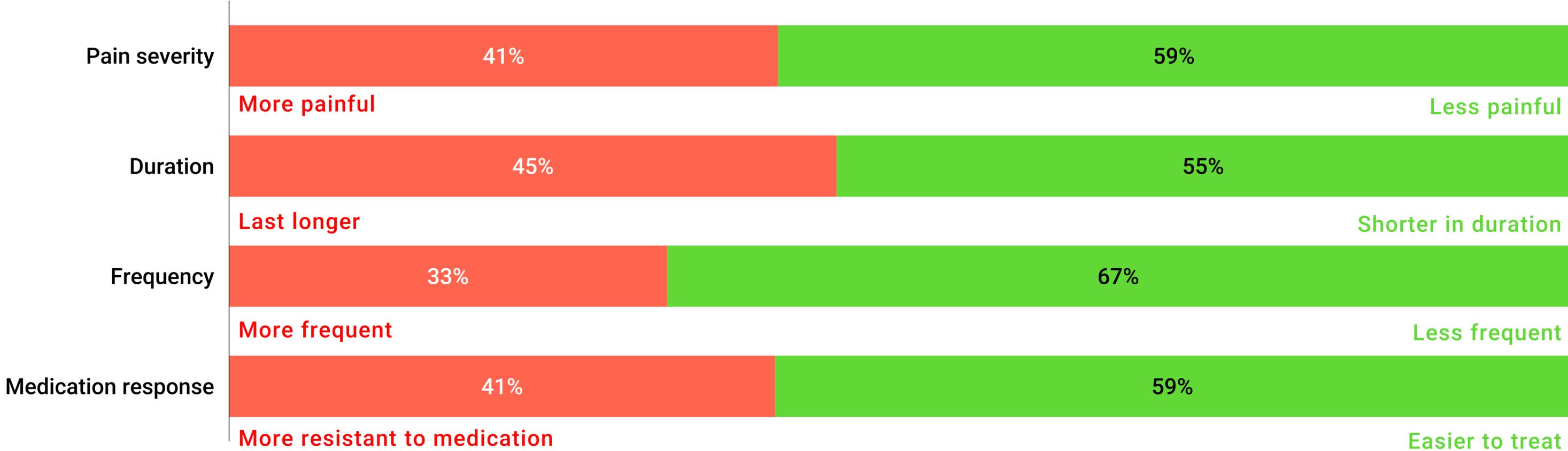
The most reported changes while on HRT (including systemic and local) are **less frequent, less painful and shorter headaches**. However, ~1 in 10 sufferers experience **more frequent headaches**.

# Headache attacks while on HRT (2/2)

~2 in 3 women who report on pain severity, duration, frequency, and medication response reported a **more positive experience** of their headache attacks while on HRT

How have headache attacks changed on HRT (includes systemic and local)? (Select all that apply)

 More negative experience  
 More positive experience



Abbreviations: HRT (hormone replacement therapy).  
Sources: Prescient Analysis, Migraine in Women Survey (sample size for these questions: 386 respondents (women on HRT or who have been on HRT in the past)).



# Headache attacks while on HRT (local vs systemic)

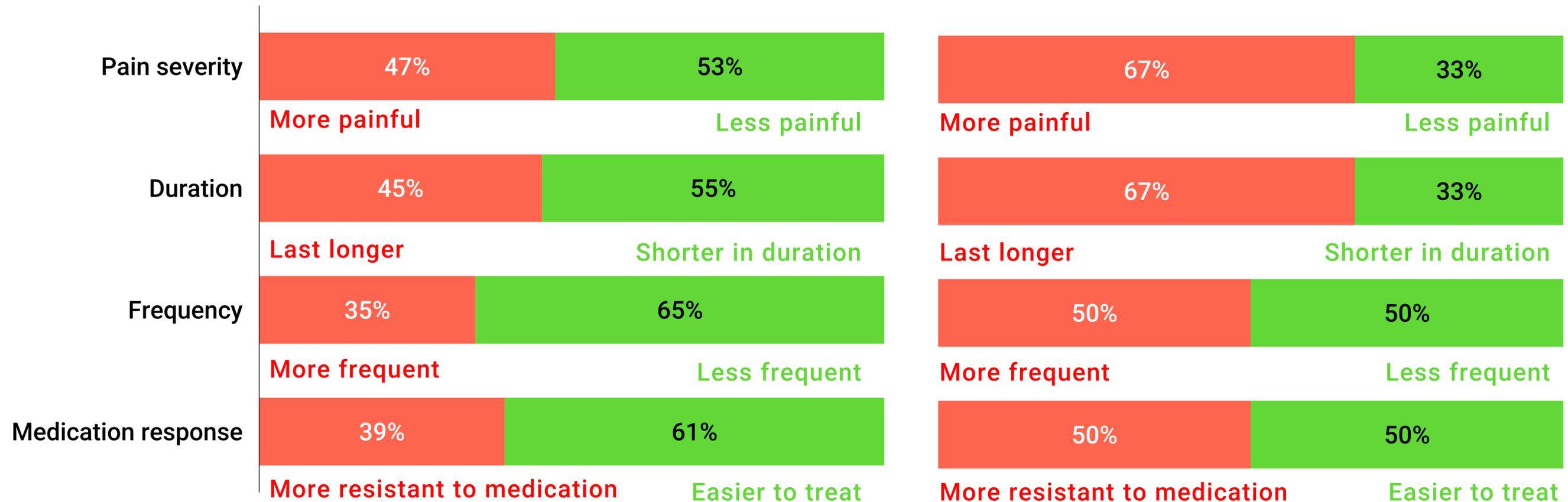
Across respondents on HRT, reported changes in headache burden were broadly similar between systemic and local vaginal therapies

How have headache attacks changed on HRT? (Select all that apply)

Systemic therapies\* (n=184)

Local vaginal tablet, ring, or cream (n=32)

Low sample size



Local vaginal estrogen is intended as a local therapy with very low systemic exposure; we therefore do not interpret these responses as a treatment effect; results shown to avoid pooling with systemic MHT

\*Includes Pills (oral), Patch, gel, or spray (through the skin), Implant  
 Abbreviations: HRT (hormone replacement therapy).  
 Sources: Prescient Analysis, Migraine in Women Survey (sample size for these questions: 386 respondents (women on HRT or who have been on HRT in the past)).

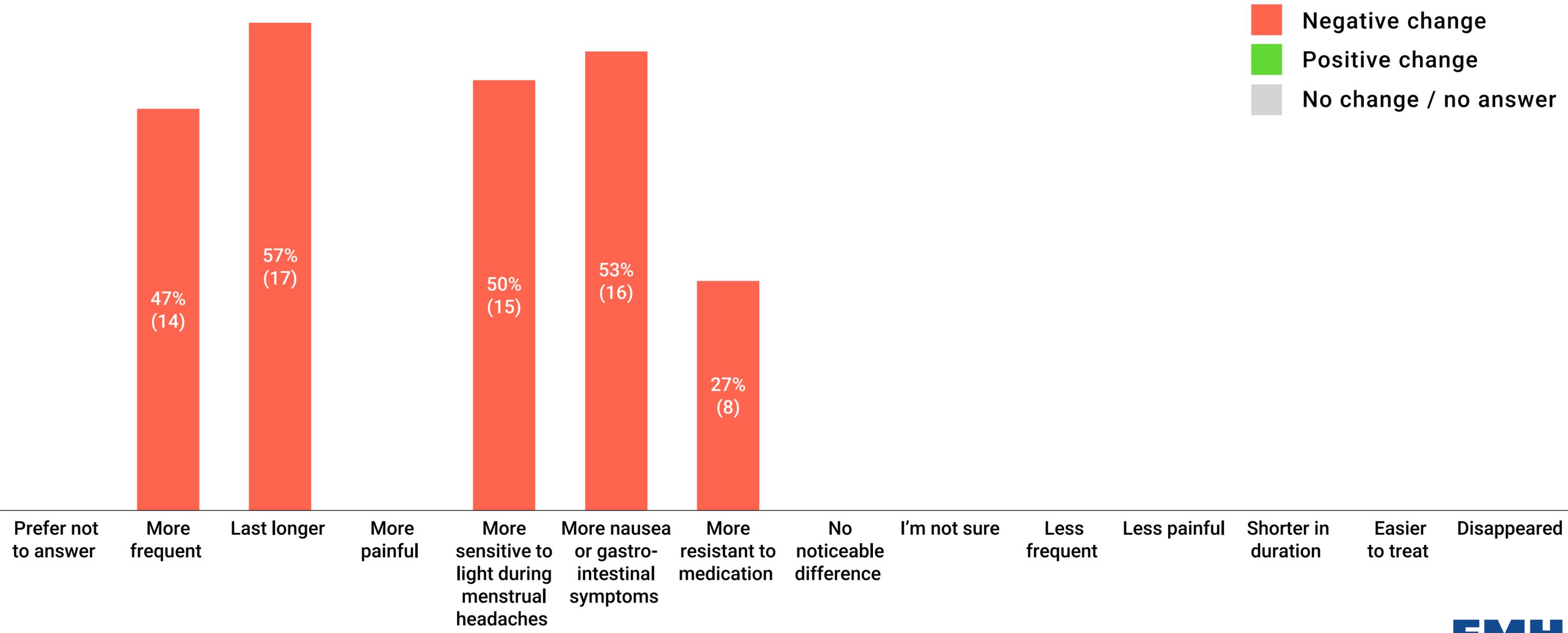
More negative experience More positive experience

# 5. Trans men and women on hormone therapy

# Hormone therapy in transgender women

All transgender women in our sample report **negative changes** in their headache attacks since starting hormone therapy

How has starting hormone therapy affected your headache attacks? (Select all that apply) Low sample size



Sources: Prescient Analysis, Migraine in Women Survey (sample size for these questions: 30).

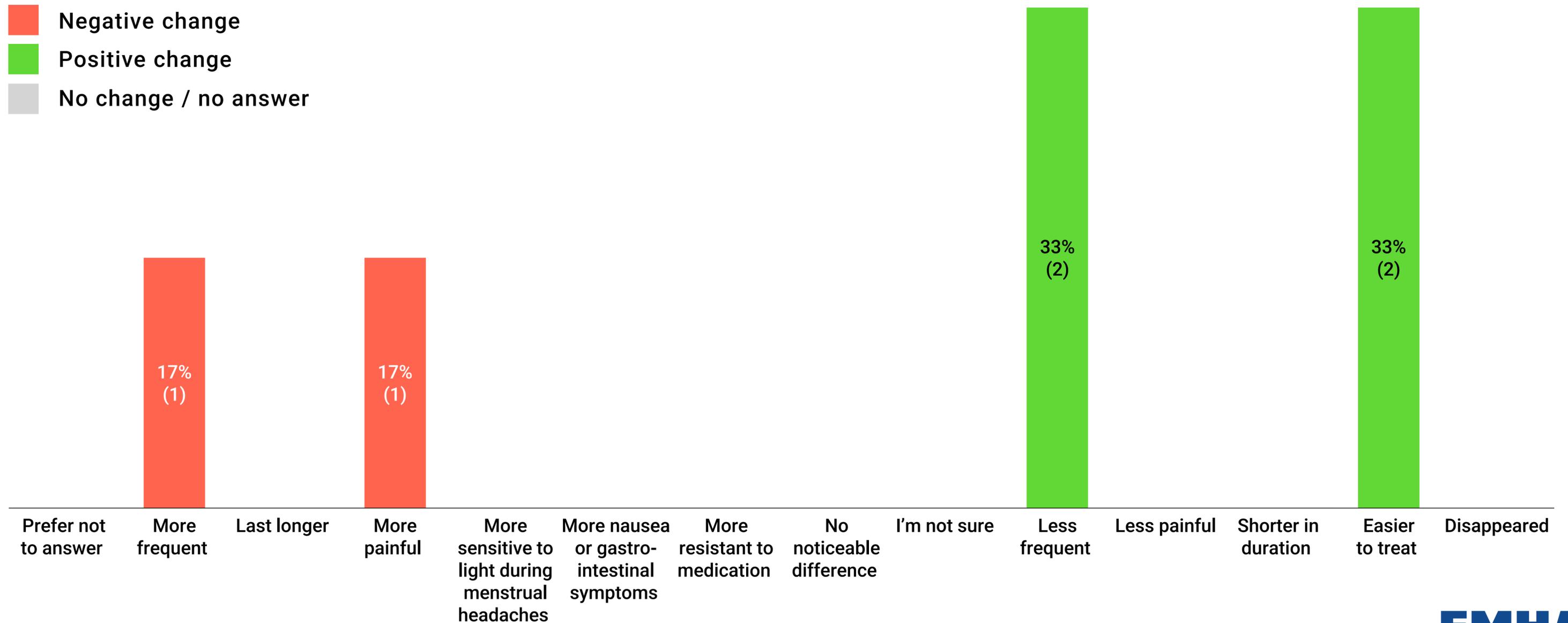


# Hormone therapy in transgender men

One in three transgender men in our sample experience **positive changes** in their headache attacks since starting testosterone therapy

How has starting testosterone therapy affected your headache attacks? (Select all that apply)

Low sample size



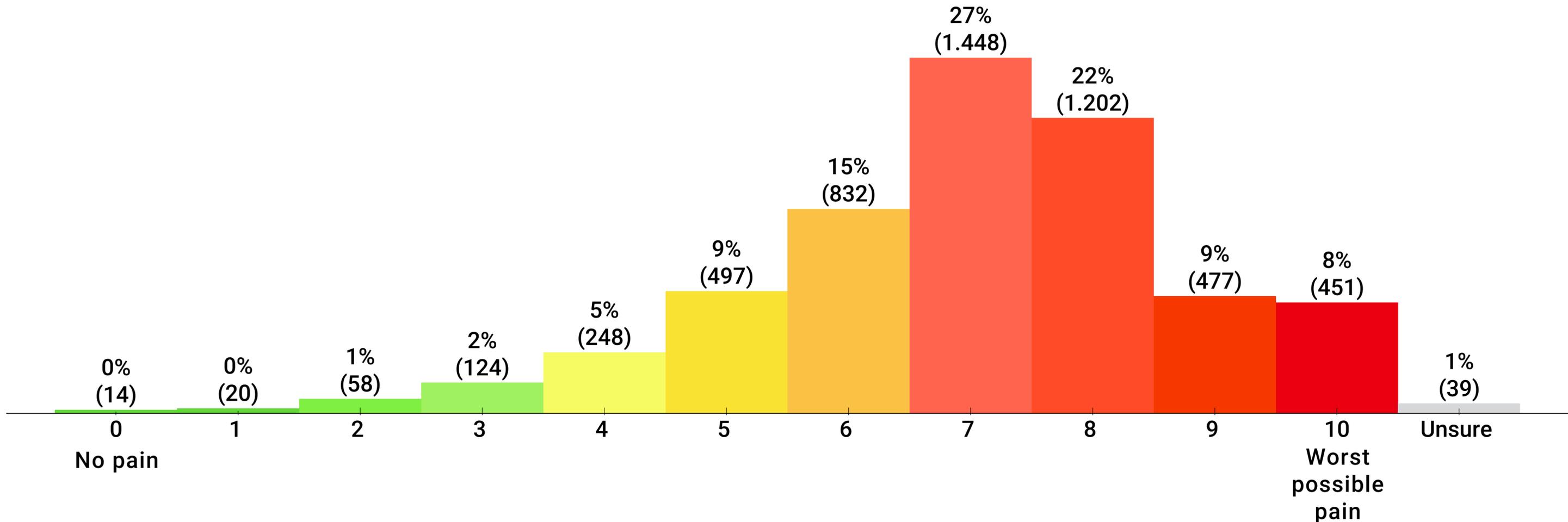
Sources: Prescient Analysis, Migraine in Women Survey (sample size for these questions: 6).

# 6. Therapy-specific questions

# Current headache burden (1/2)

Most respondents report a substantial headache burden, with >80% reporting pain at or above 6/10, with 10 being the “worst possible pain”

On a scale from 0 to 10, where 0 means no pain and 10 means the worst possible pain, how intense is your headache?

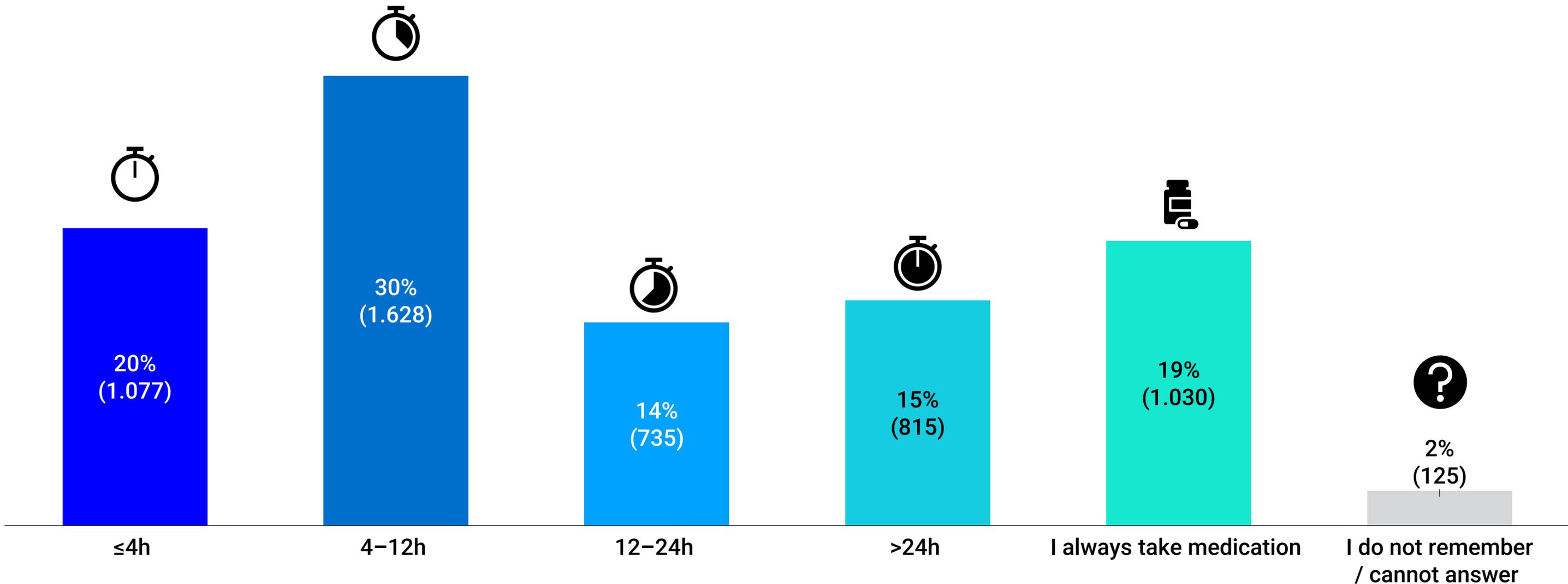


Within this survey, 82% of respondents rate their headache pain at 6 or above, and 8% describe it as the **worst possible pain**, indicating a significant symptom burden among sufferers

# Current headache burden (2/2)

Without medication, most attacks last 4-12 hours, and roughly 1 in 3 last  $\geq 12$  hours

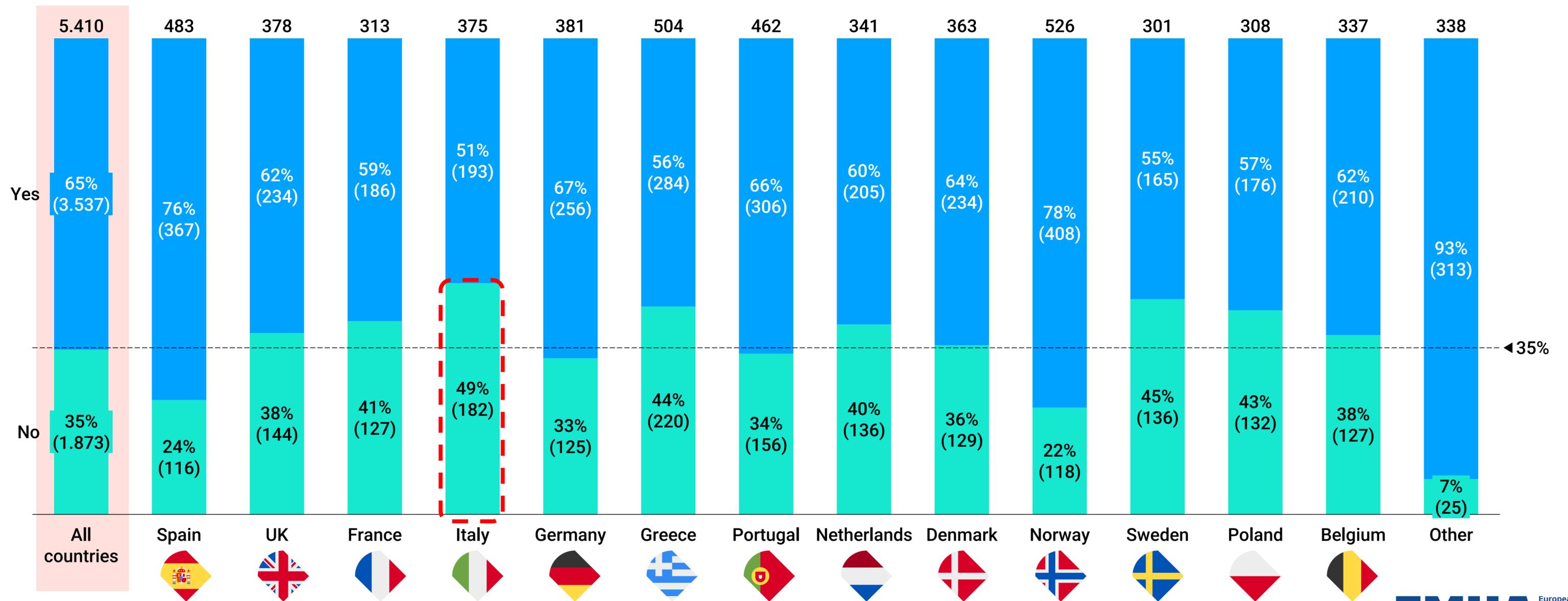
How many hours and/or days do your headache attacks typically last without pain medication?



# Diagnosis & treatment gaps (1/5)

Despite this, 35% of sufferers have not sought medical attention for their headache burden, with the gap most notable in Italy

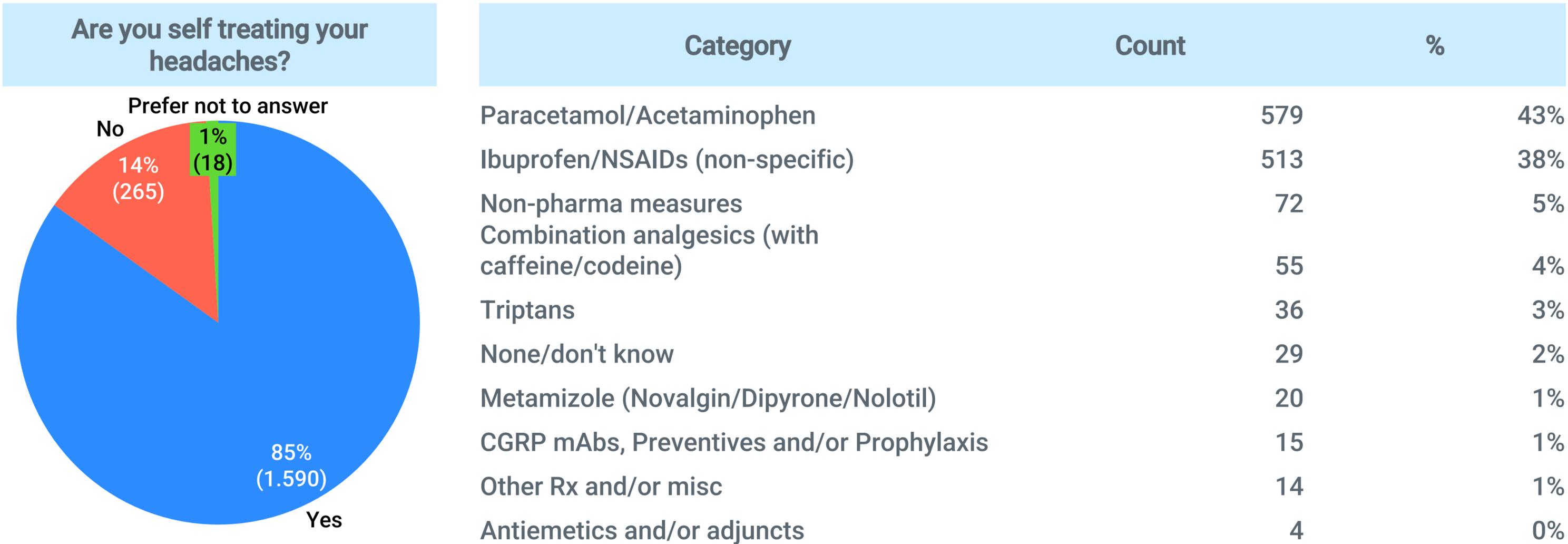
Has your burden driven you to visit a doctor?



Sources: Prescient Analysis, Migraine in Women Survey (sample size for these questions: 5,410 respondents).

# Diagnosis & treatment gaps (2/5)

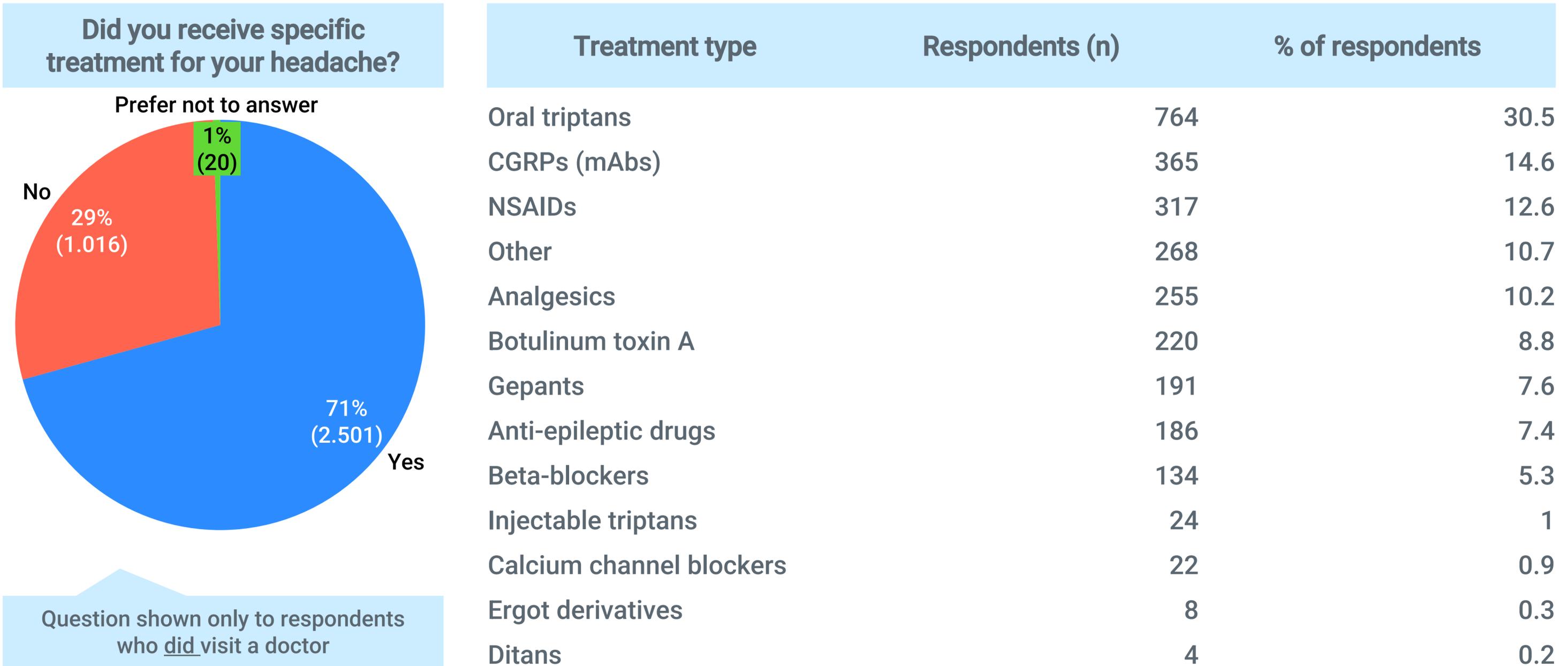
Among those who never sought medical care, 85% self-treat, mostly with paracetamol or ibuprofen



Notes: Further detail in notes section; Abbreviations: NSAIDs (non-steroidal anti-inflammatory drugs), mAbs (monoclonal antibodies), CGRP (calcitonin gene-related peptide), mAbs (monoclonal antibodies). Sources: Prescient Analysis, Migraine in Women Survey (sample size for these questions: 1,873 respondents).

# Diagnosis & treatment gaps (3/5)

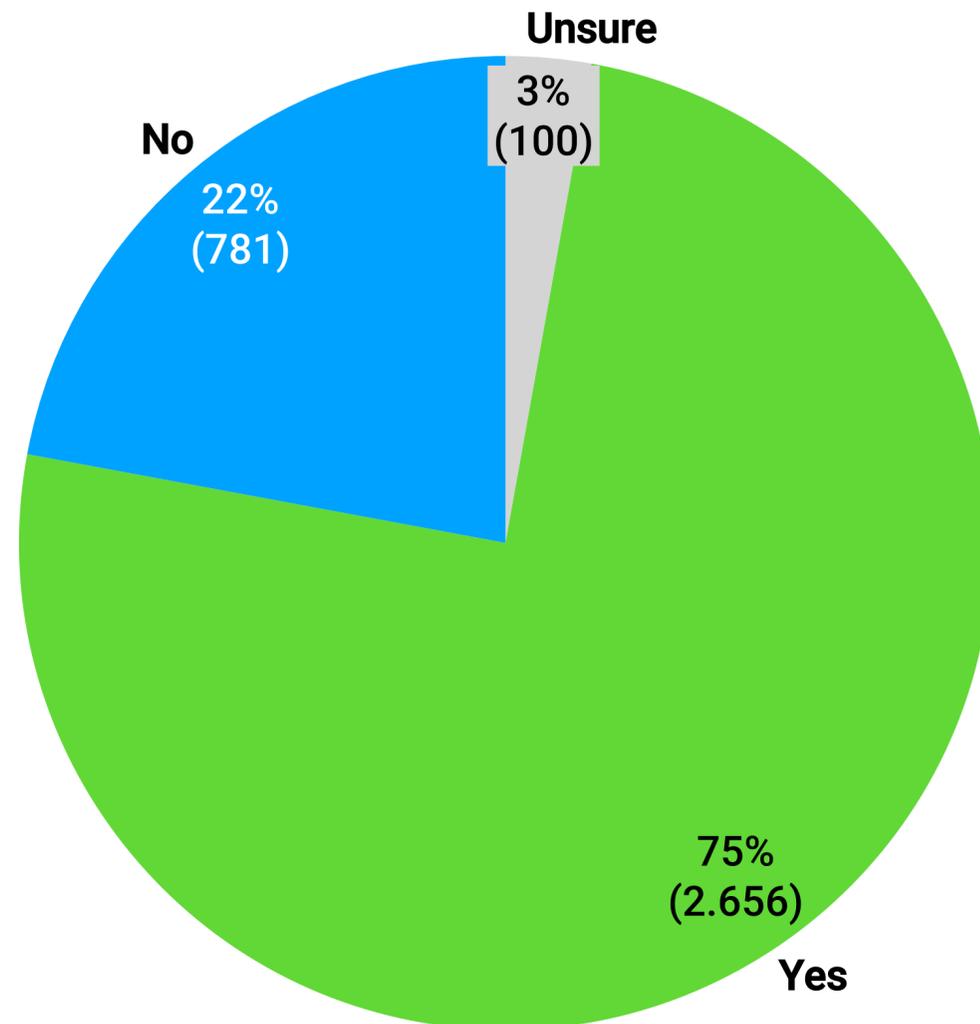
In contrast, 71% of those who sought medical attention received specific headache treatment



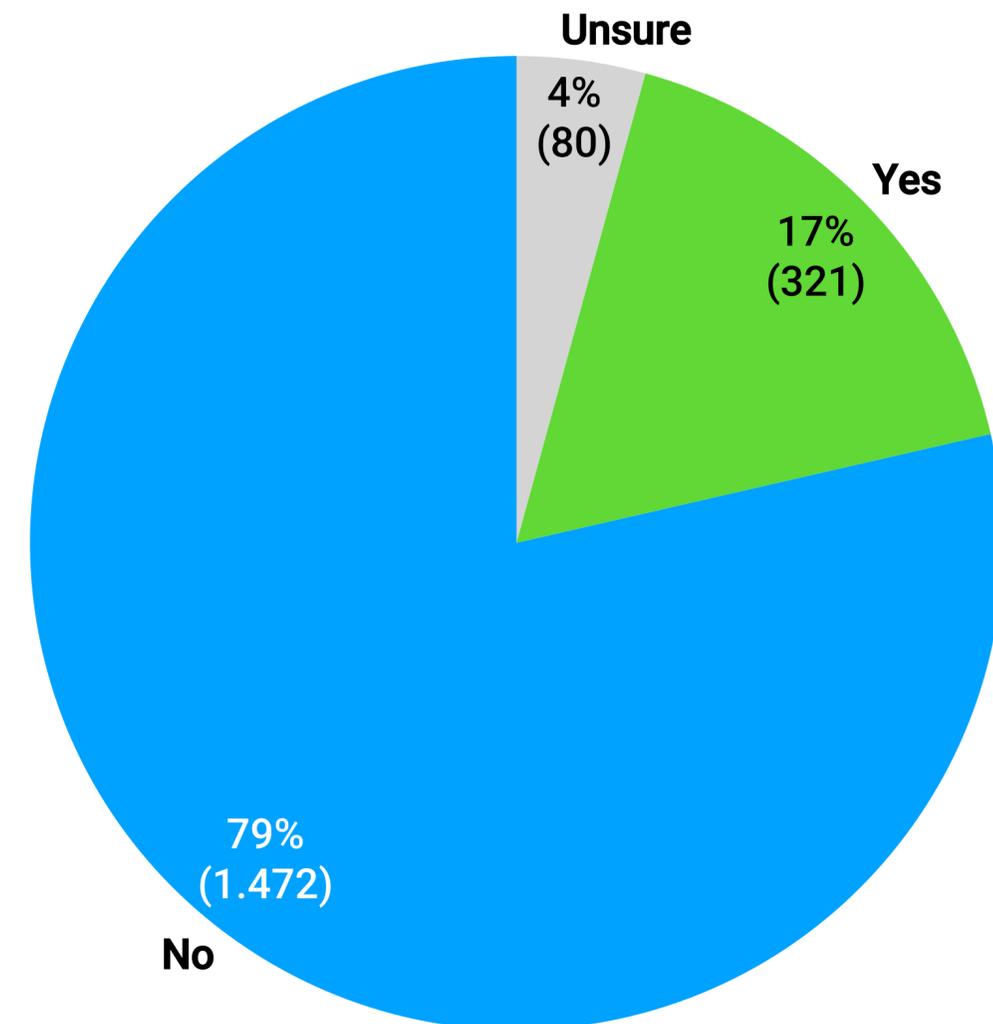
# Diagnosis & treatment gaps (4/5)

Yet large gaps in diagnosis remain across the sample, with those seeing a doctor being four times more likely to receive a formal migraine diagnosis (75% vs. 17%)

Formal diagnosis of migraine among those who did see a doctor



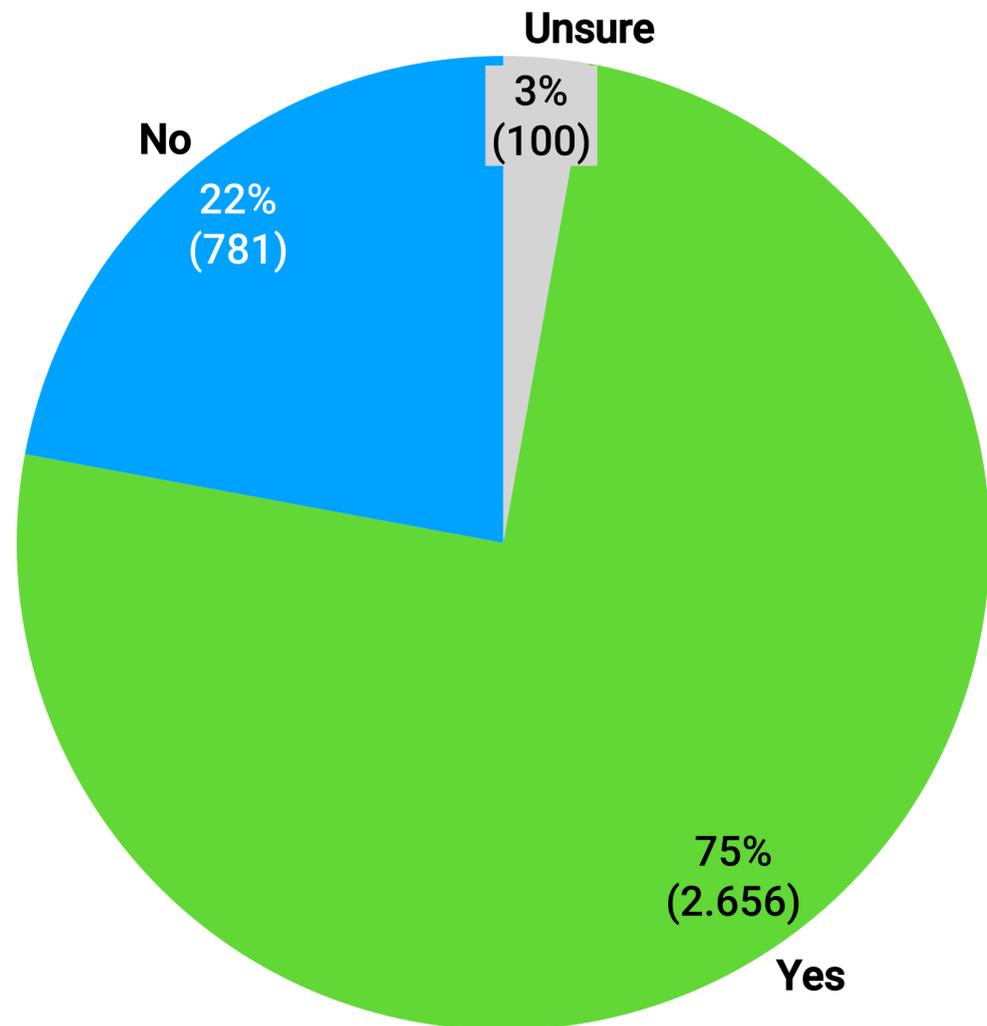
Formal diagnosis of migraine among those who did not see a doctor



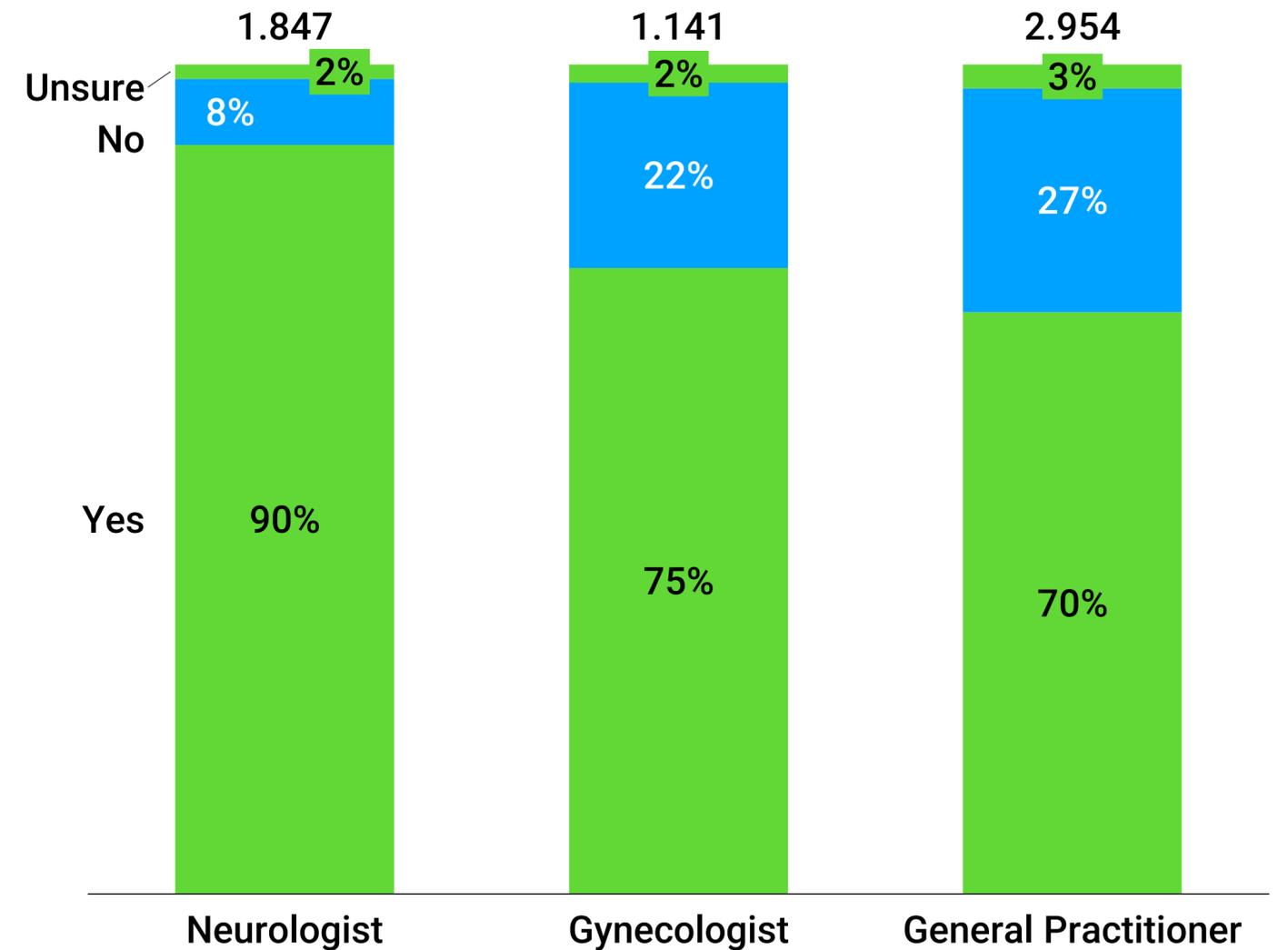
# Diagnosis & treatment gaps (5/5)

Diagnosis rates also vary by physician type, and seeing a neurologist is associated with the highest diagnosis rate

Formal diagnosis of migraine among those who did see a doctor



Formal diagnosis for those who visited different types of doctor

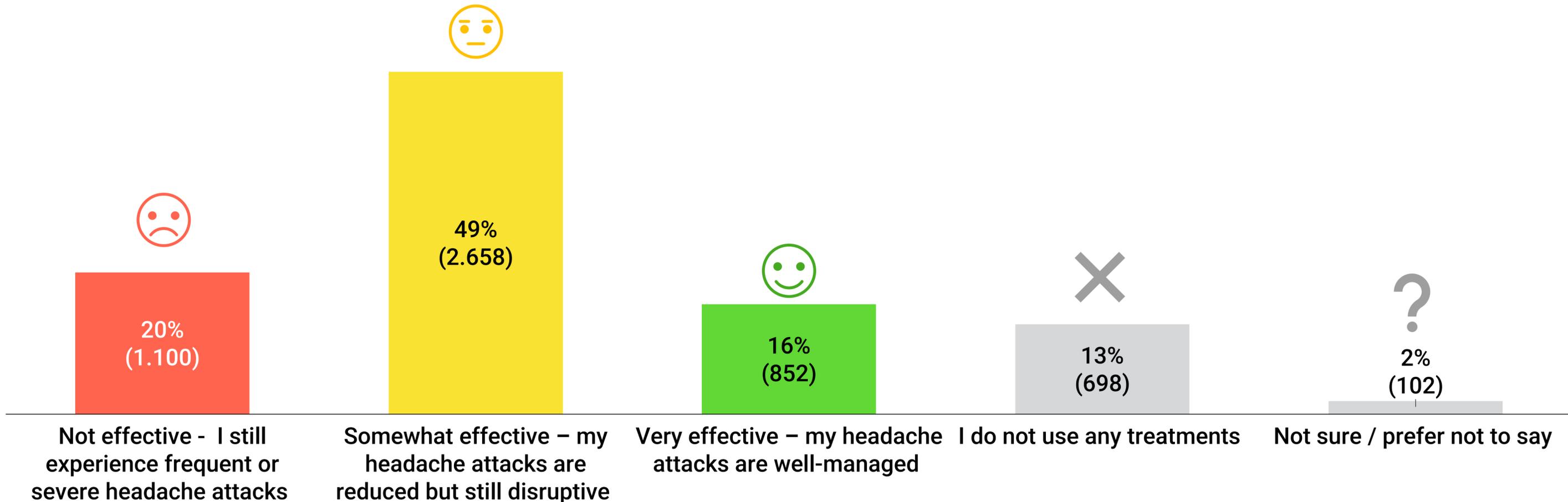


Sources: Prescient Analysis, Migraine in Women Survey (sample size for these questions: 3,537 in doctor visit group vs. 1,873 respondents in non-visit group).

# Perceived treatment effectiveness (1/3)

Even when treated, perceived effectiveness is limited; across the whole survey sample, only 16% consider their current treatments “very effective”

## How effective are treatments?

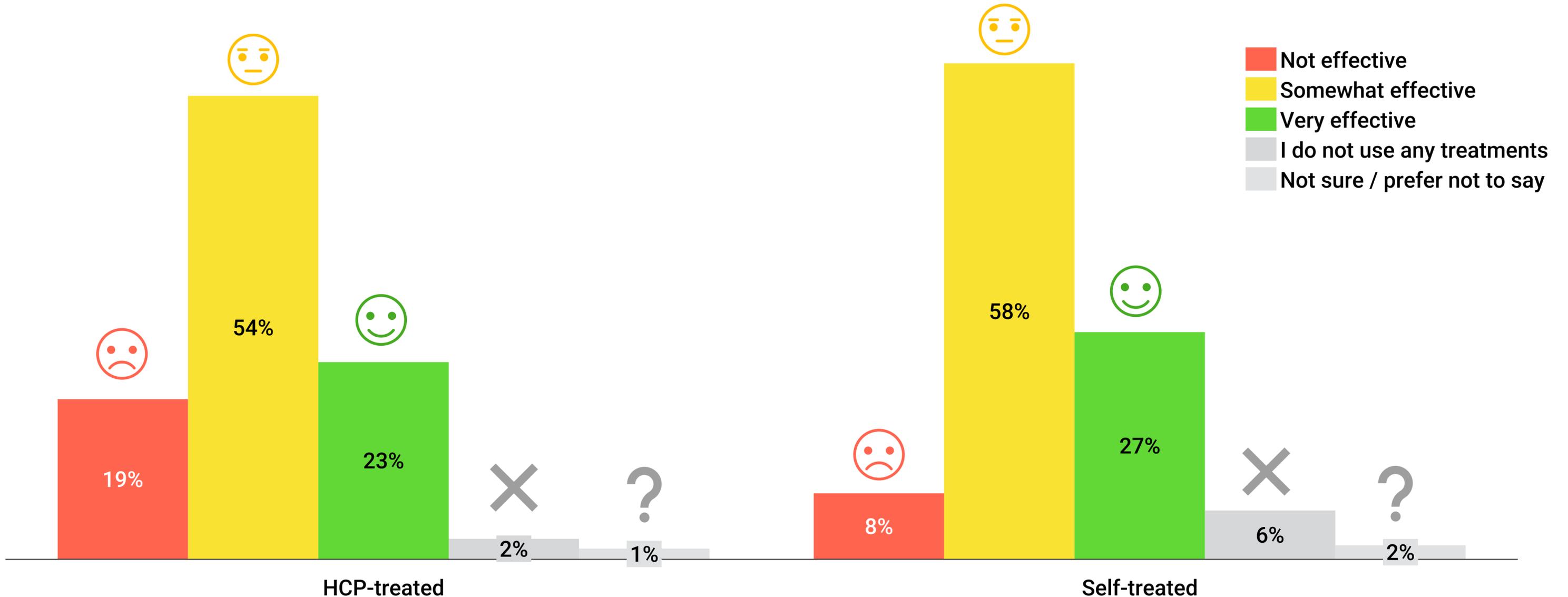


Just 16% of sufferers rate headache treatments as very effective, whereas **the majority (69%) still experience frequent or disruptive headaches**, indicating perceived unmet therapeutic needs

# Perceived treatment effectiveness (2/3)

Self-treaters rate their current approach as more effective overall than HCP-treated respondents

How effective are treatments?



Sources: Prescient Analysis, Migraine in Women Survey (sample size for self-treaters is 1590 and for HCP-treated is 2501)

# Perceived treatment effectiveness (3/3)

Although HCP-treated respondents skew slightly more severe

On a scale from 0 to 10, where 0 means no pain and 10 means the worst possible pain, how intense is your headache?



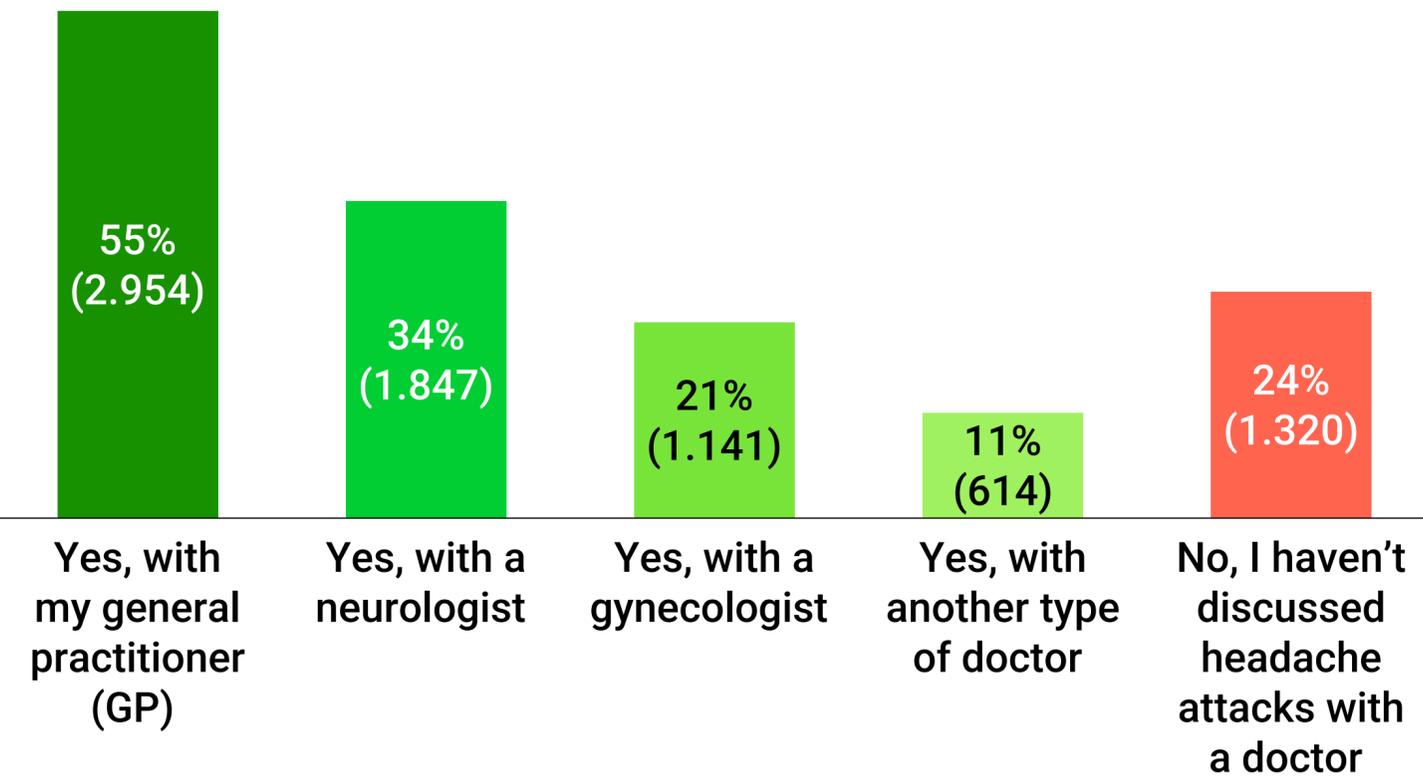
Sources: Prescient Analysis, Migraine in Women Survey (sample size for self-treaters is 1590 and for HCP-treated is 2501)



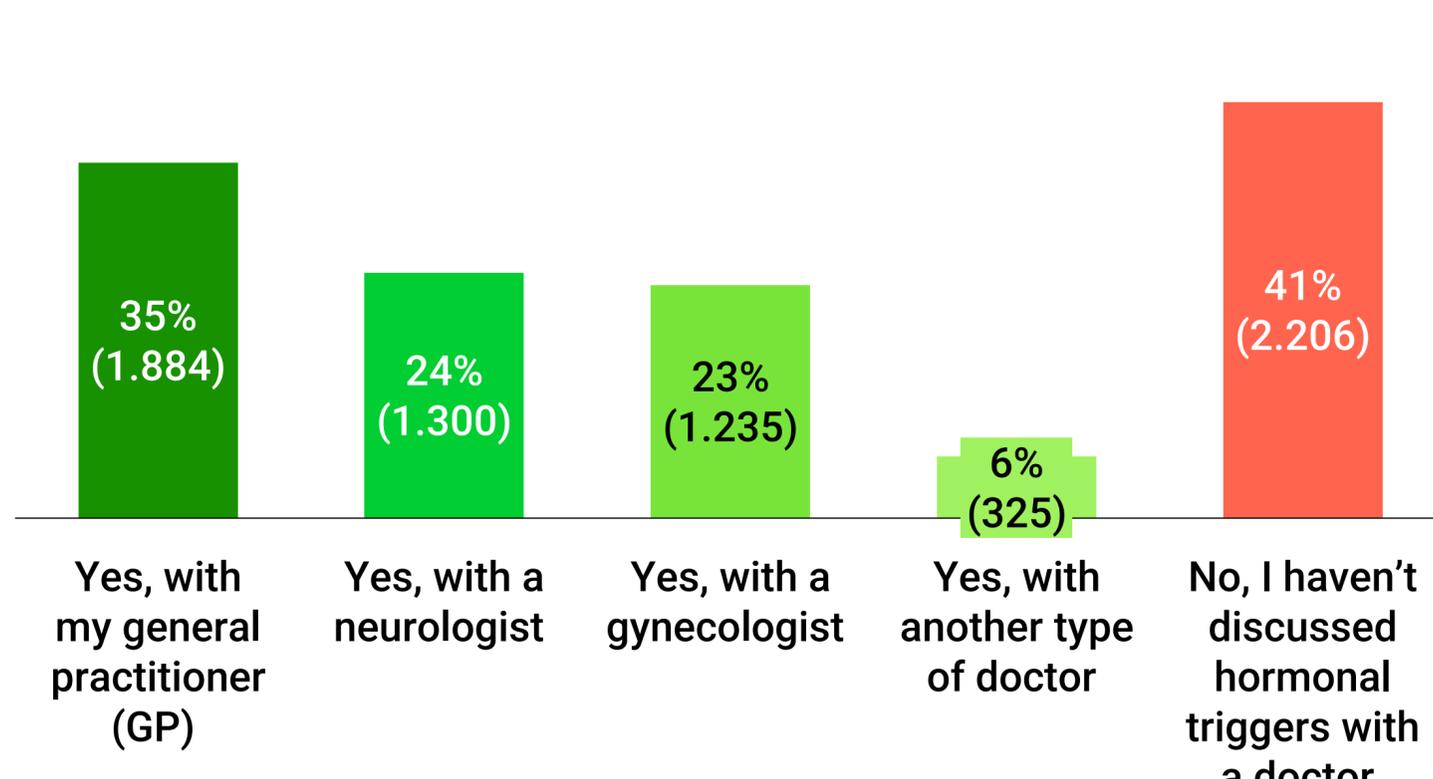
# Healthcare conversations

Finally, while 76% have discussed headaches with a healthcare professional, only ~59% have discussed hormonal triggers

Have you discussed your headache attacks with any of the following healthcare providers?  
(Select all that apply)



Have you specifically discussed possible hormonal triggers of your headaches with any of the following?  
(Select all that apply)



The largest share of sufferers who discussed hormonal triggers did so with GPs, followed by neurologists and gynaecologists

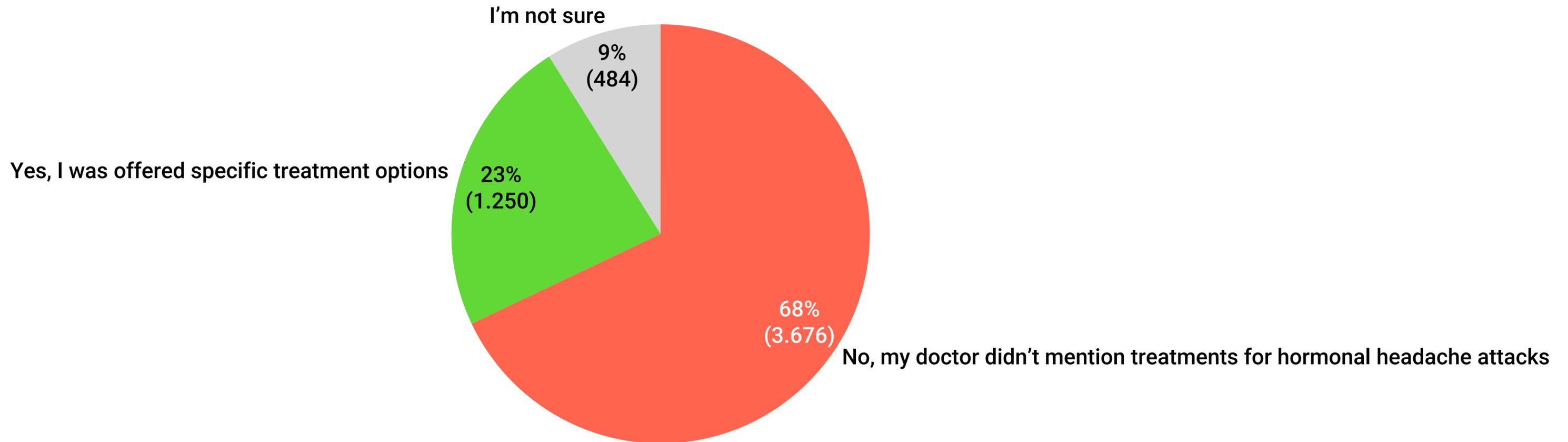
Abbreviations: GP (general practitioner), HCP (healthcare provider).

Sources: Prescient Analysis, Migraine in Women Survey (sample size for these questions: 5,410 respondents).

# Tailored menstrual or menopausal treatment (1/2)

68% were never offered tailored treatment for menstrual or menopausal attacks

Were you offered tailored treatment for menstrual or menopausal headache attacks?

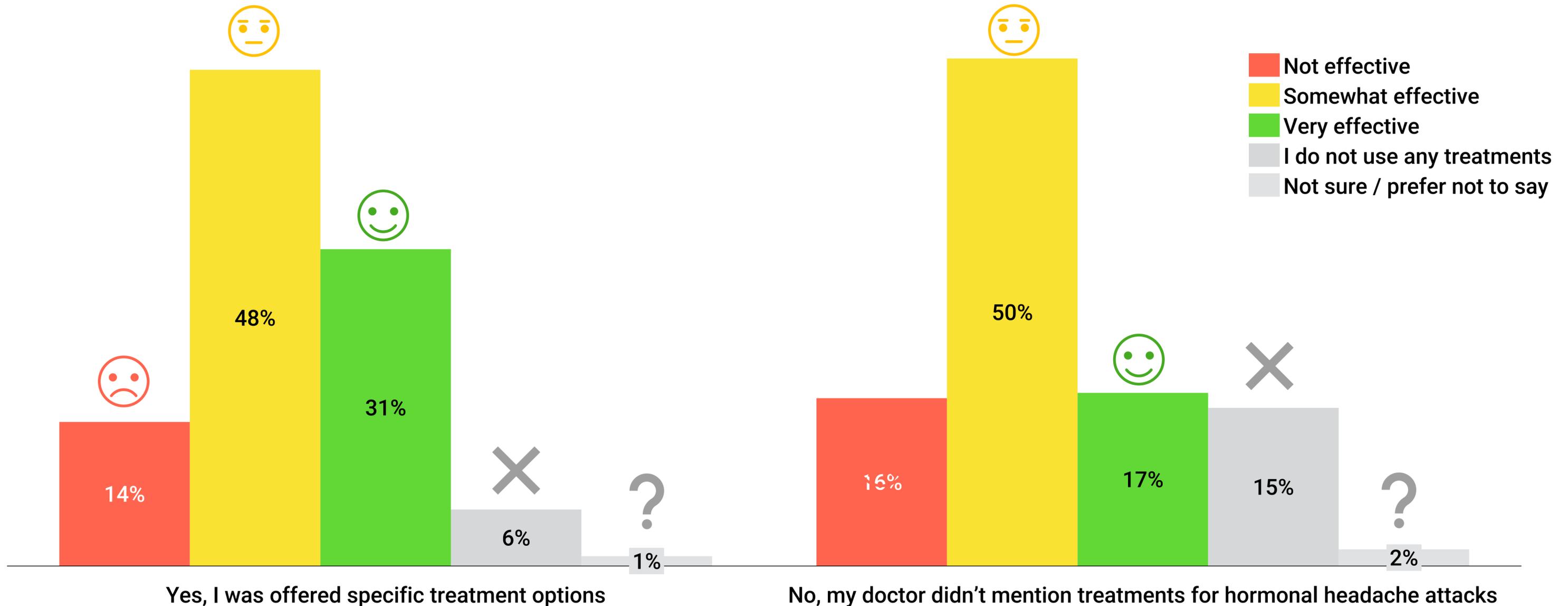


Despite respondents reporting a perceived pattern in hormonal changes and migraine, **only 23% were offered specific treatment options** for menstrual or menopausal headache attacks

# Tailored menstrual or menopausal treatment (2/2)

Despite tailored care being associated with much higher “very effective” ratings

## How effective are treatments?



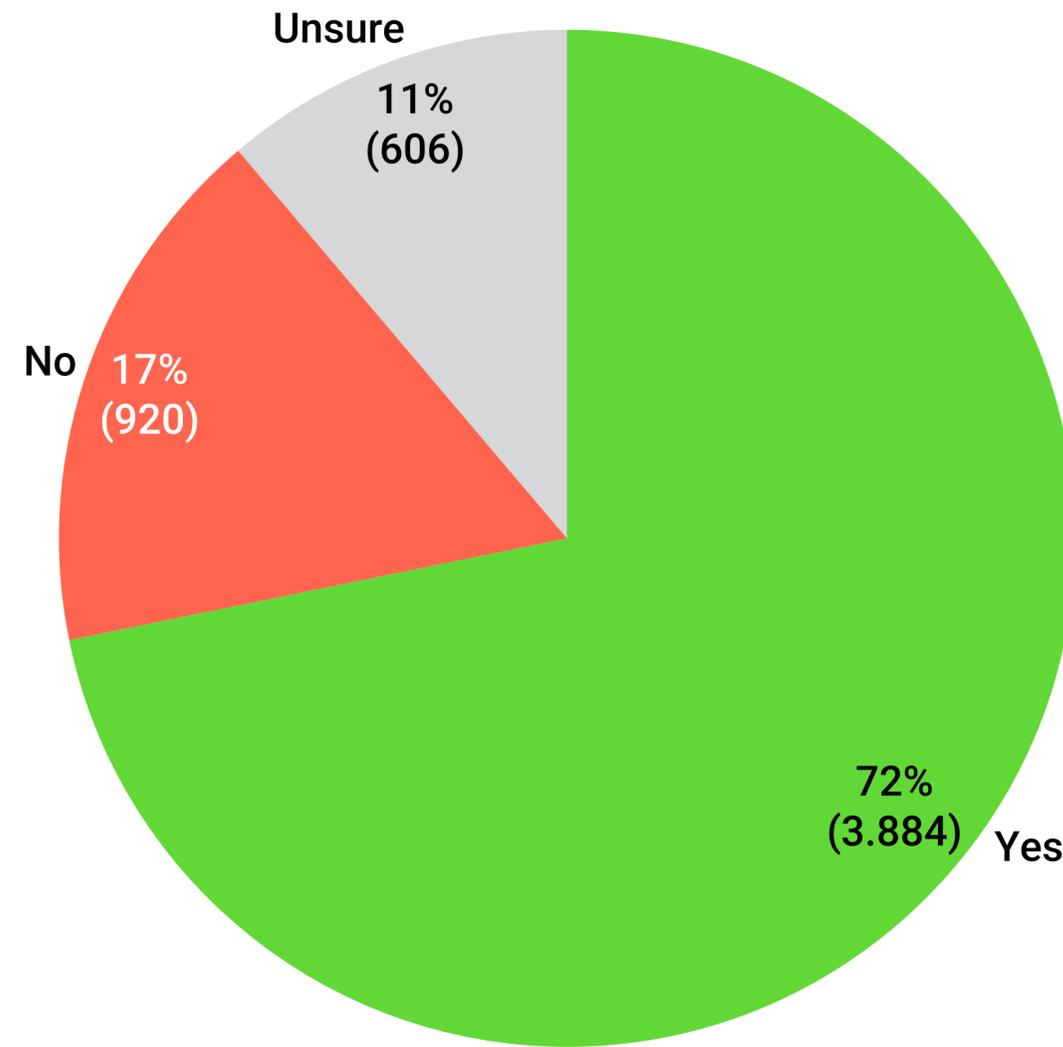
Sources: Prescient Analysis, Migraine in Women Survey (sample size for those receiving tailored treatment is 1250 and for those not receiving tailored treatment is 3676)

# 7. Impact and Awareness

# Interest in education on hormonal headaches

Seven out of ten respondents would like more education on the link between hormones and headache attacks

Would you like more education on hormone – headache attacks links?



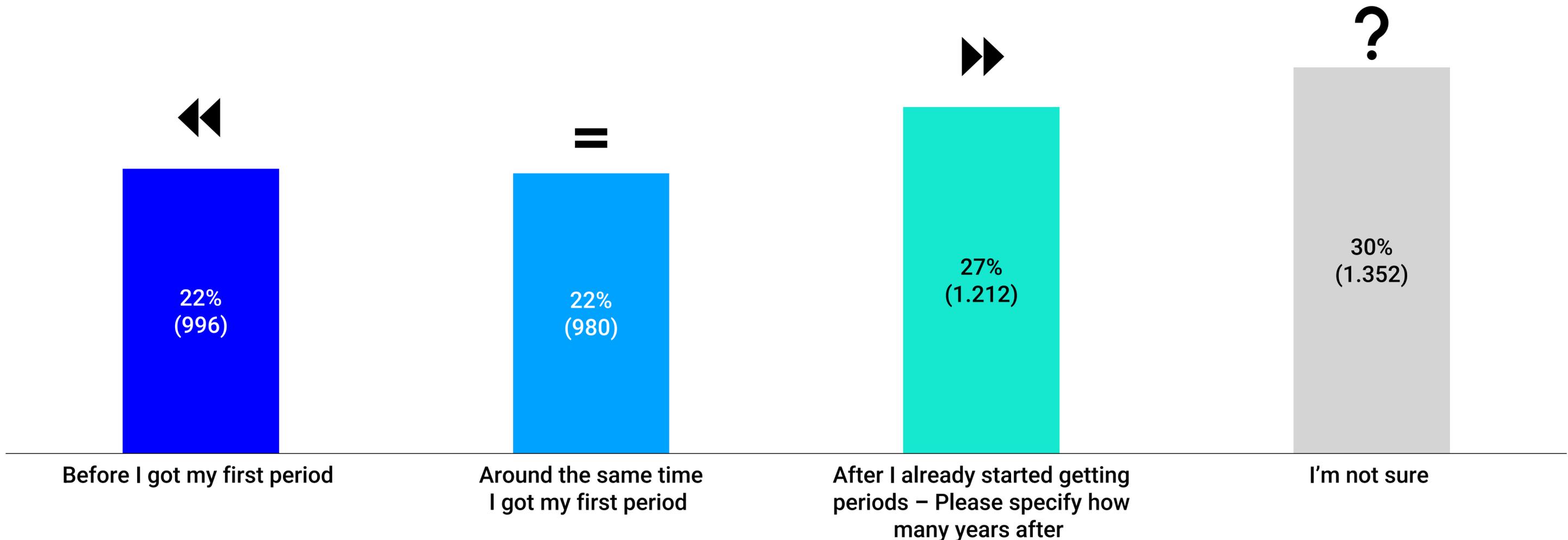
# 8. Retrospective Questions

# Onset of headaches relative to menarche (1/2)



Headache onset was **diverse**, with roughly equal distribution before, during and after menarche

When did your headaches first begin?

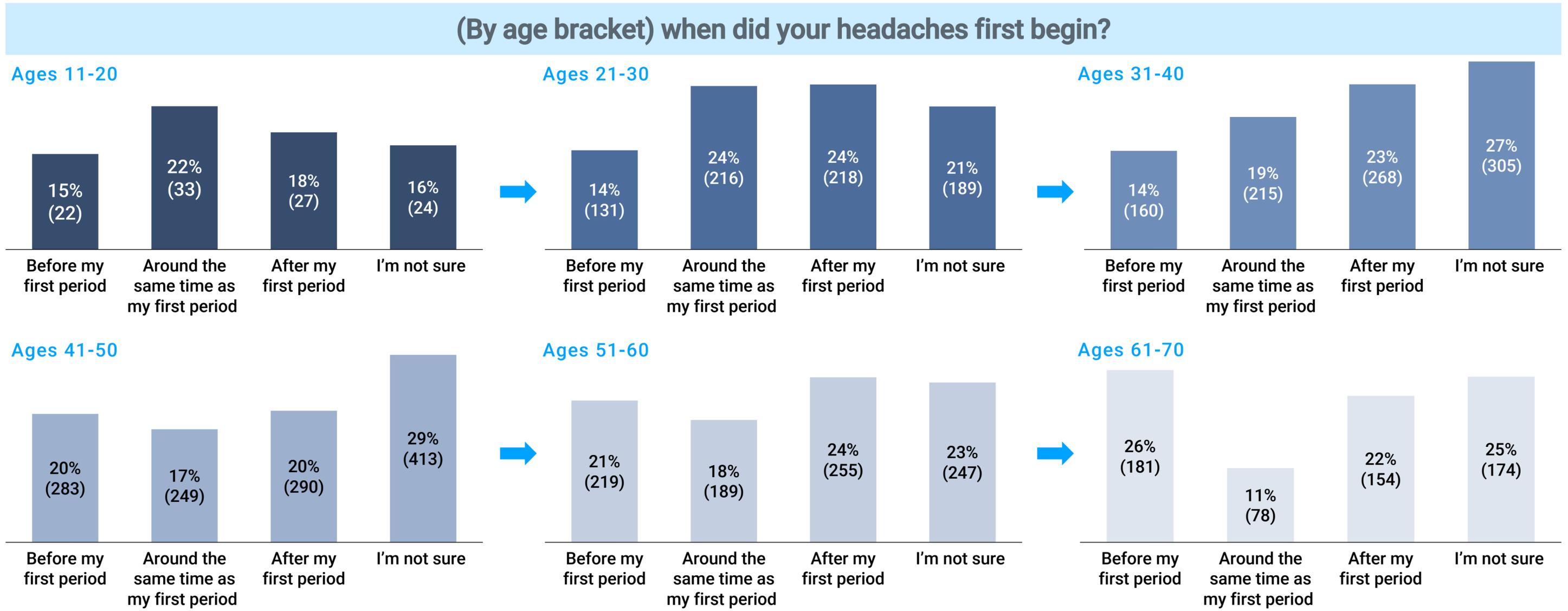


**Headache onset was evenly distributed across life stages** surrounding menarche. Roughly one in four experienced headaches before, during and after their first period, indicating no dominant timing for migraine onset.



# Onset of headaches relative to menarche (2/2)

Most younger participants (11-30) report headache onset around or after their first period (22-24%)



There is a marked increase in the share of respondents reporting headaches, before menarche, with increasing age (21-26% in respondents aged 51-70 vs. 14-15% in respondents aged 11-40); this may suggest recall bias as the share of respondents reporting “I’m not sure” increased to 23-25% among respondents aged 51-70.

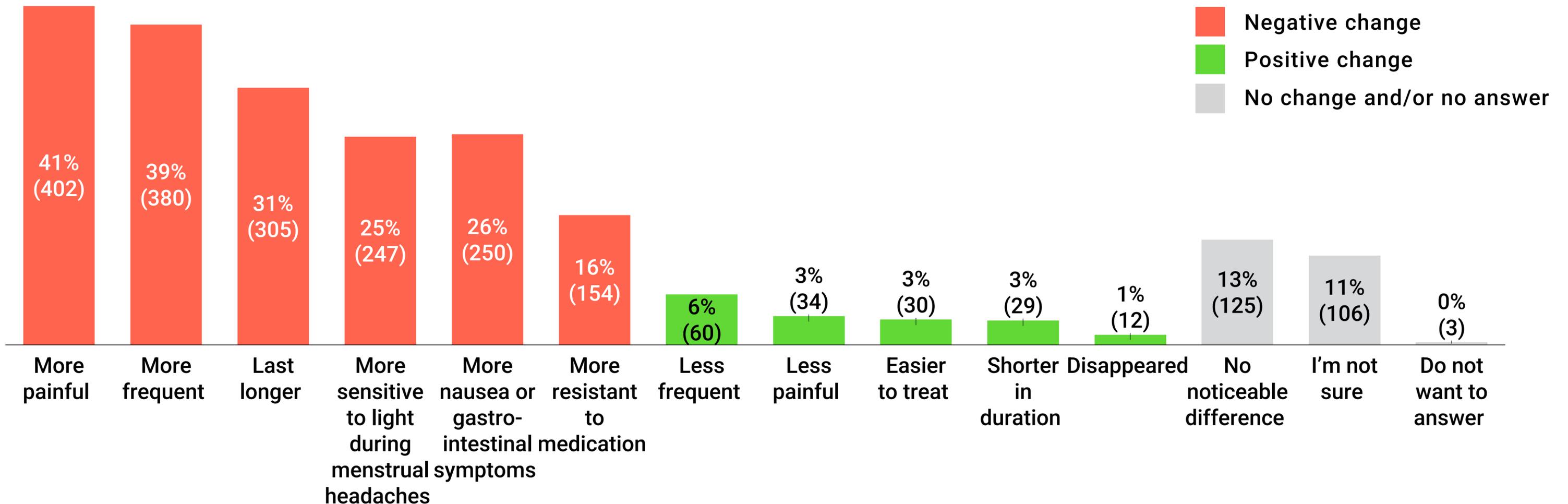
Note: Sample size for these questions: 4,540 respondents.



# Menarche and headache changes (1/6)

A large majority of respondents reported worsening headache symptoms around menarche

How did your headache attacks change around the time you began having periods? (Select all that apply)



A large majority of respondents experienced worsening headaches around menarche, with the most reported symptoms being **more painful** (41%), **more frequent** (39%) and **longer-lasting headaches** (31%)

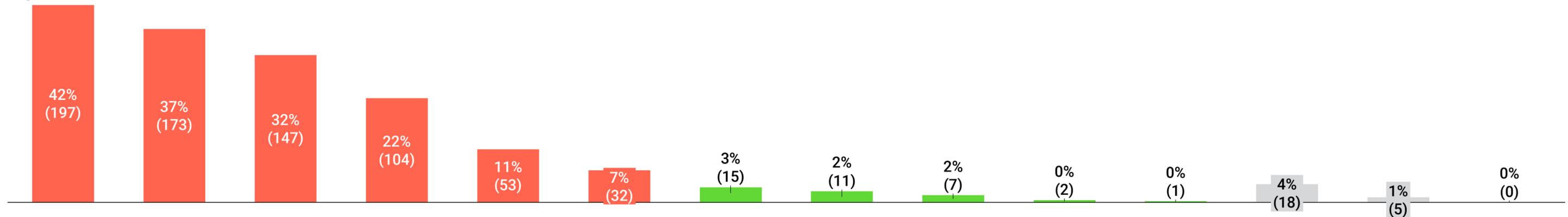


# Menarche and headache changes (2/6)

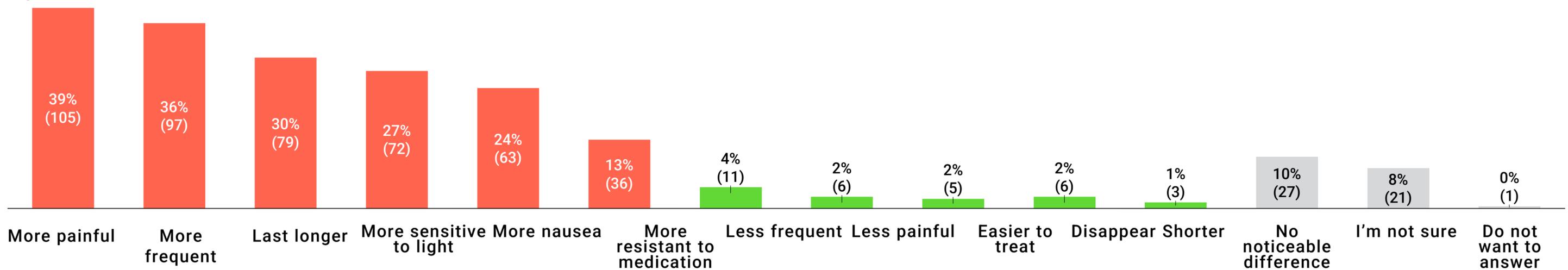
Consistent patterns of headache worsening at menarche across age cohorts

(By age bracket) How did your headache attacks change around the time you began having periods? (Select all that apply)

Ages 11-40



Ages 41-70



Across both age cohorts (11-40 and 41-70), most respondents report that their headaches **became worse** when they began menstruating

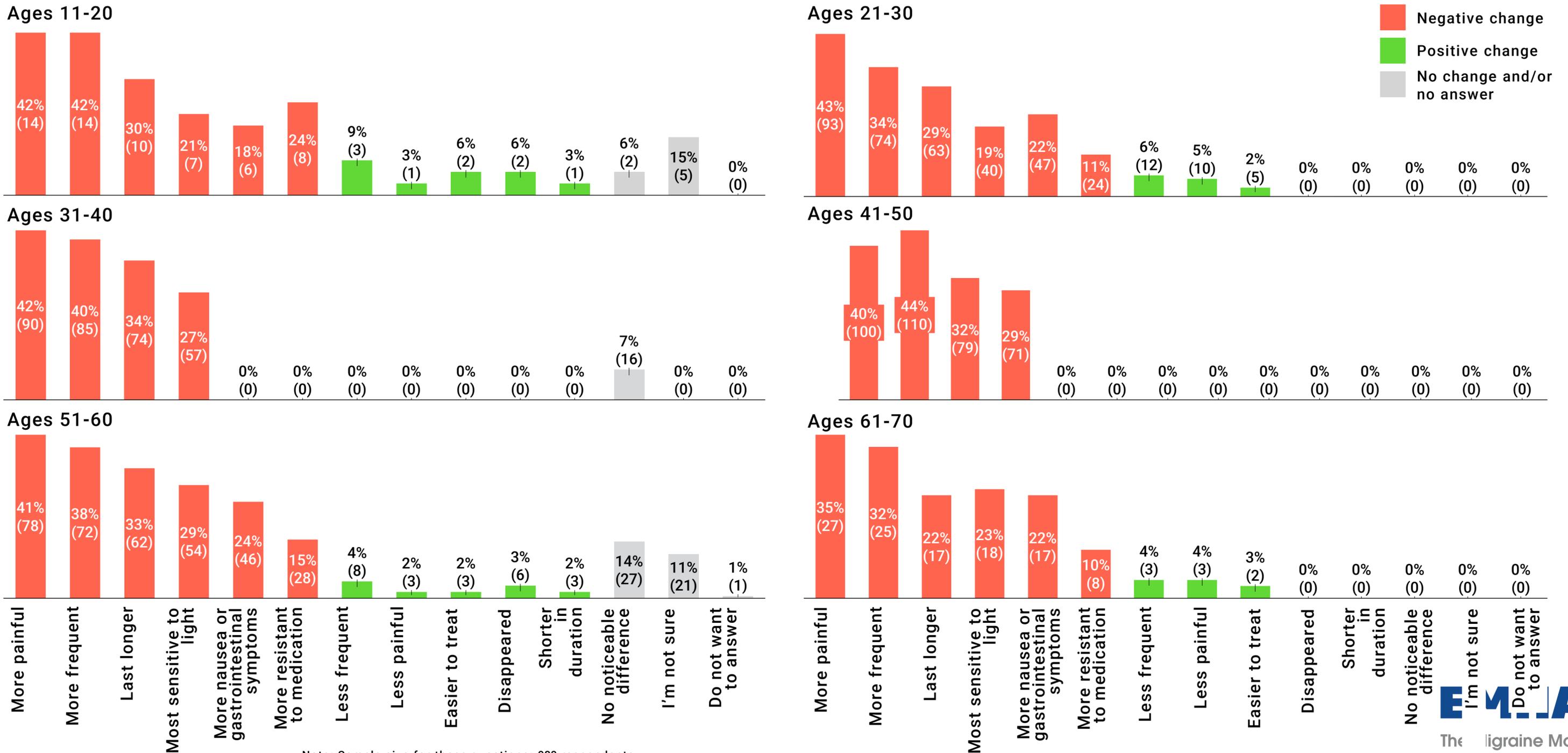
Note: Sample size for these questions: 980 respondents.

# Menarche and headache changes (3/6)



Consistent patterns of headache worsening at menarche across age cohorts

(By age bracket) How did your headache attacks change around the time you began having periods? (Select all that apply)



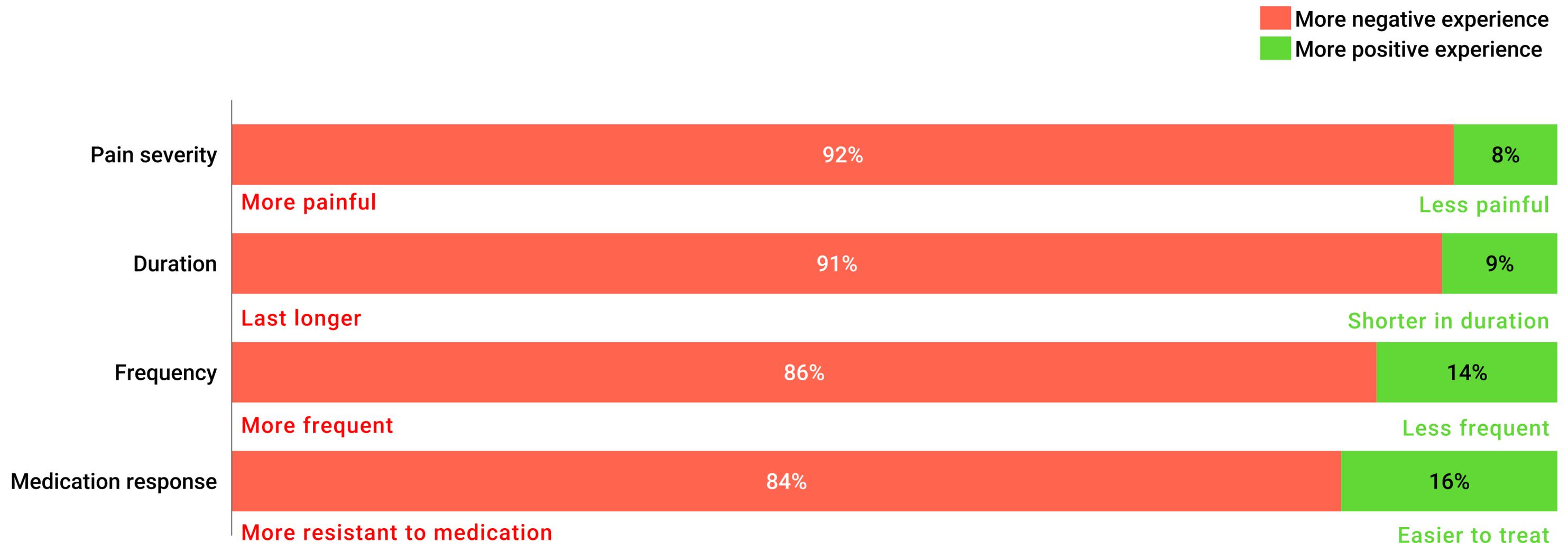
Note: Sample size for these questions: 980 respondents



# Menarche and headache changes (4/6)

Over 90% of women who reported on pain and duration, said headache attacks became **more painful** and **longer lasting** after starting their period

How did your headache attacks change around the time you began having periods? (Select all that apply)

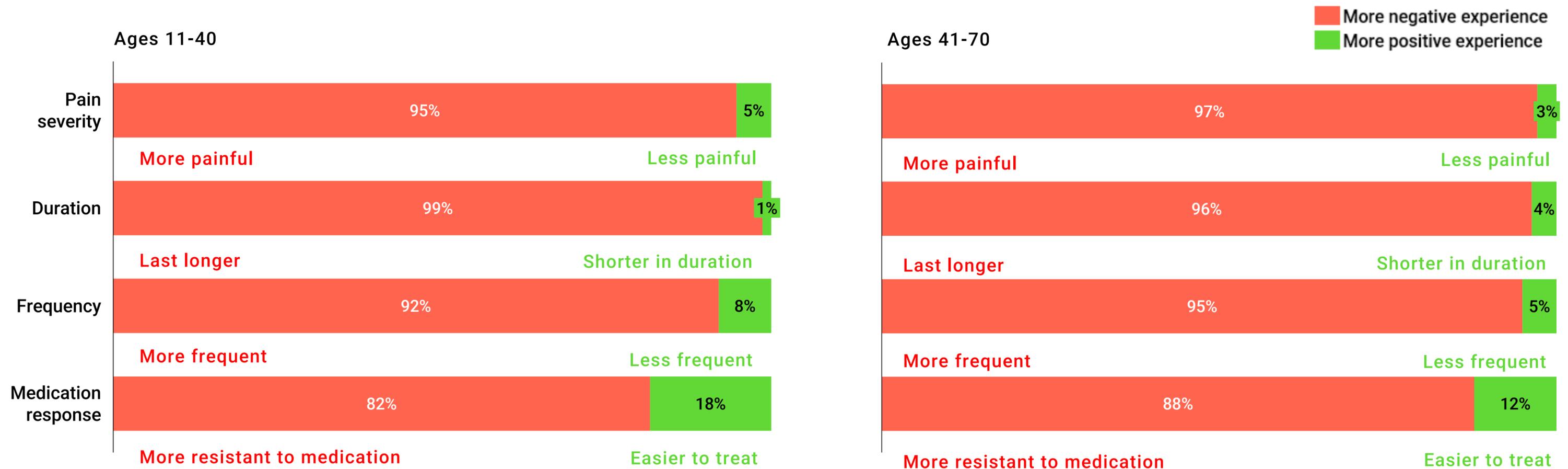


# Menarche and headache changes (5/6)



## Consistent patterns of headache worsening at menarche across age cohorts

How did your headache attacks change around the time you began having periods? (Select all that apply)



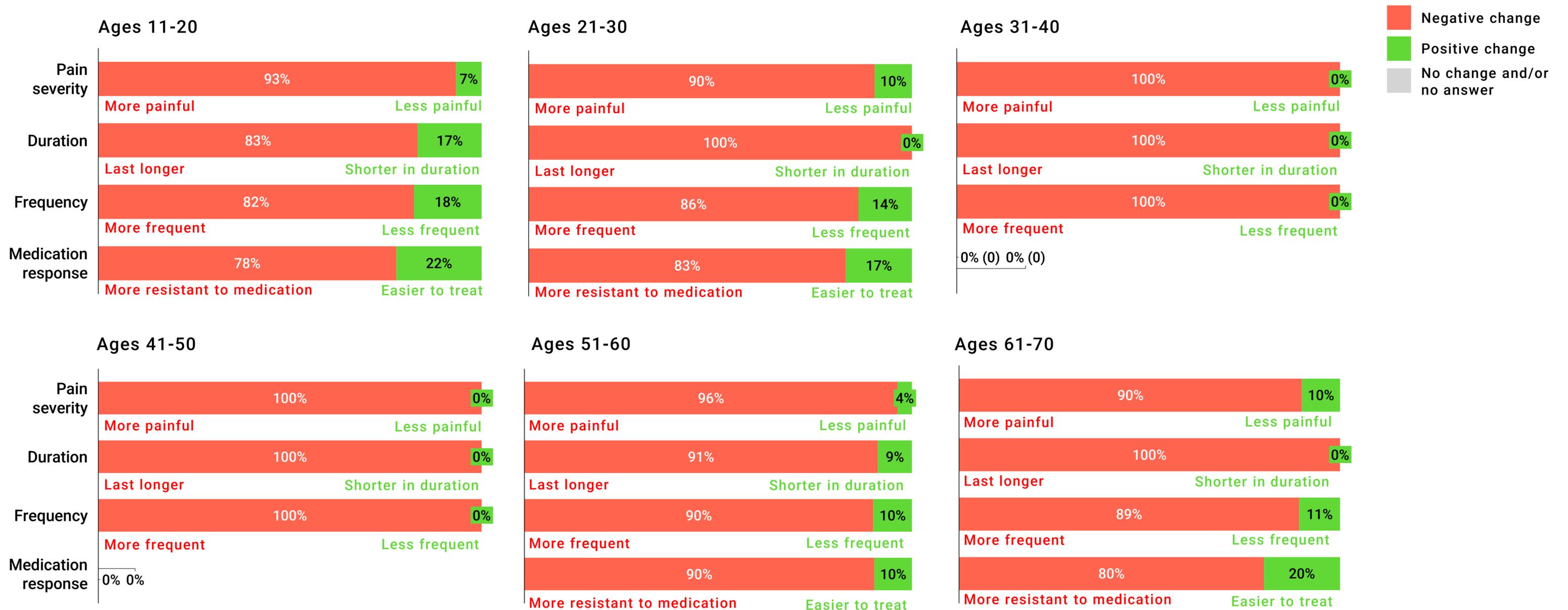
In both age cohorts, almost all respondents report a **more negative experience** around menarche, across pain severity, duration, frequency and medication response

# Menarche and headache changes (6/6)



## Consistent patterns of headache worsening at menarche across age cohorts

How did your headache attacks change around the time you began having periods? (Select all that apply)



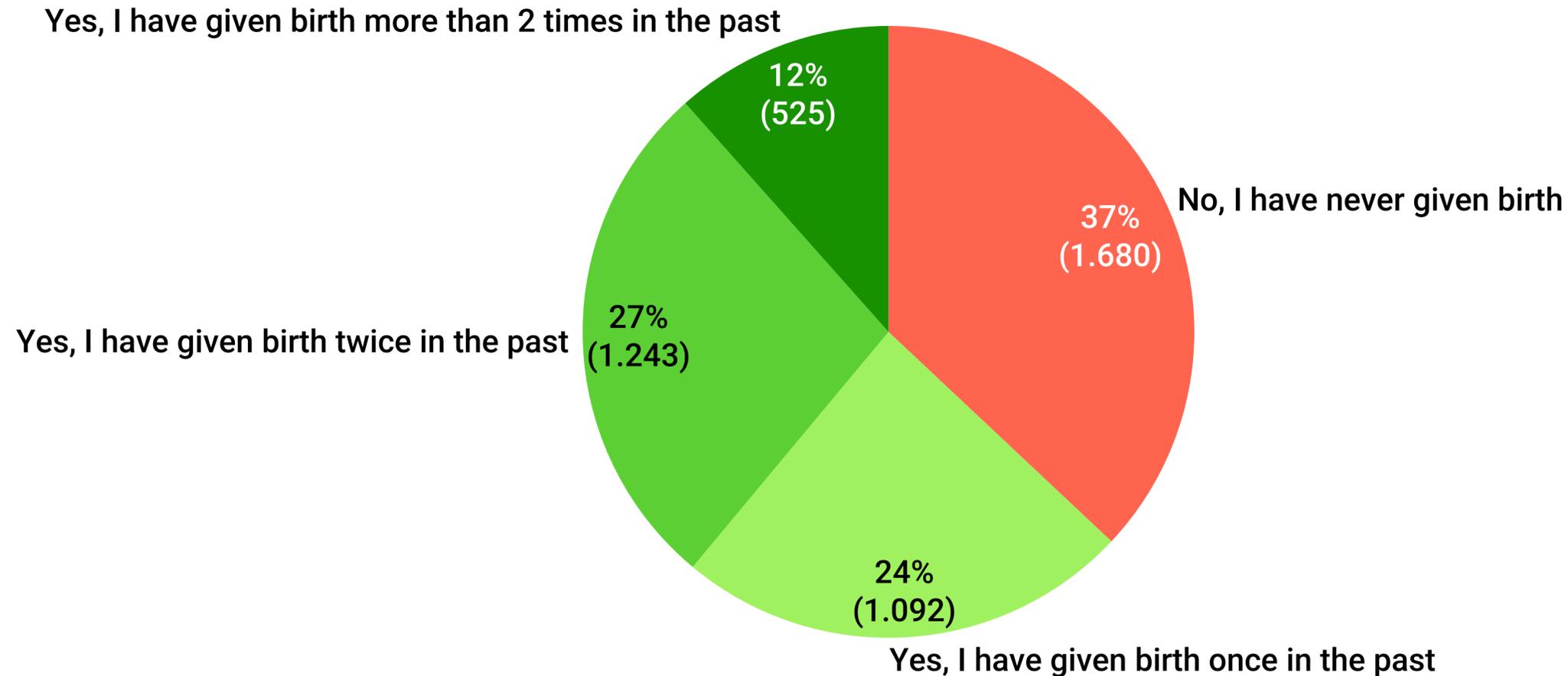
Note: Sample size for these questions: 980 respondents.

# Respondent history of childbirth



A total of 2,860 respondents have given birth in the past

Have you given birth in the past?

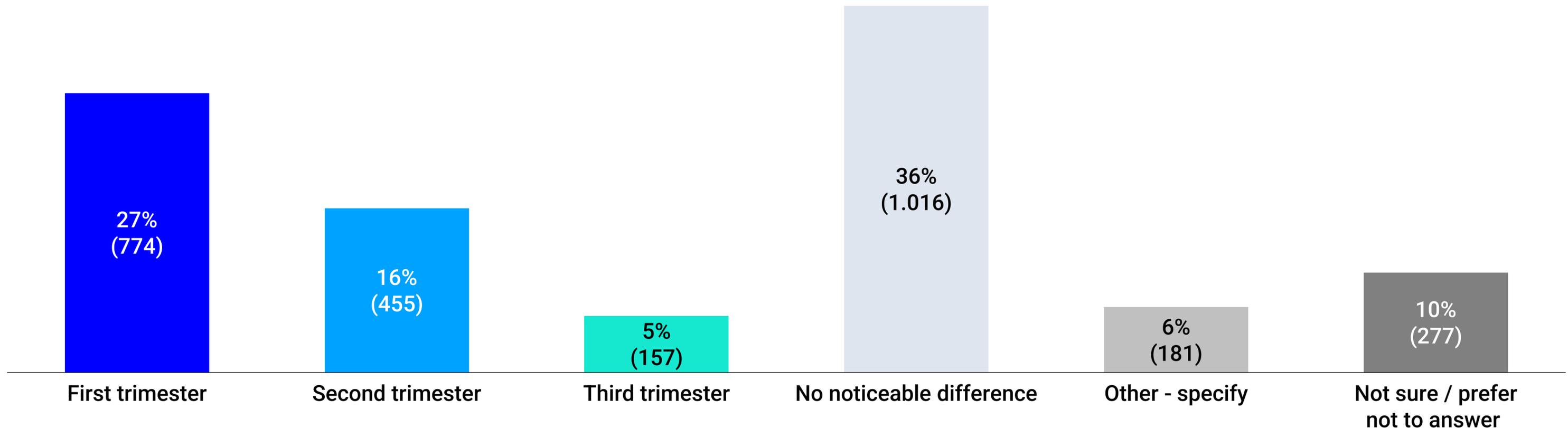




# Headache intensity by pregnancy trimester

Over one-third of respondents reported no noticeable difference in headache intensity between trimesters; those who noticed a difference mostly reported Trimester 1 to be the most difficult

Which pregnancy trimester has been the most difficult for headache attacks?



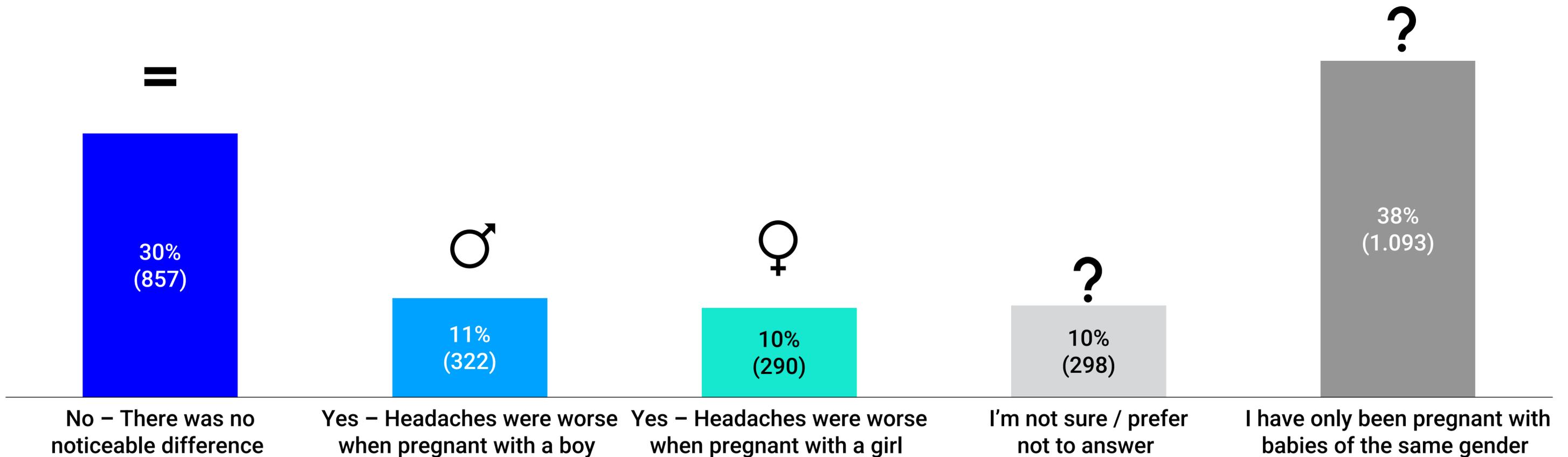
Over one-third of respondents report no noticeable difference in headache intensity between trimesters. Among those who reported a difference, headaches tended to be more severe earlier on in pregnancy.



# Headache intensity by baby sex

Most respondents did not notice differences in headache attacks based on the baby's sex

If you have been pregnant with babies of different sexes, did you notice any difference in your headache or migraine attacks based on the baby's sex?



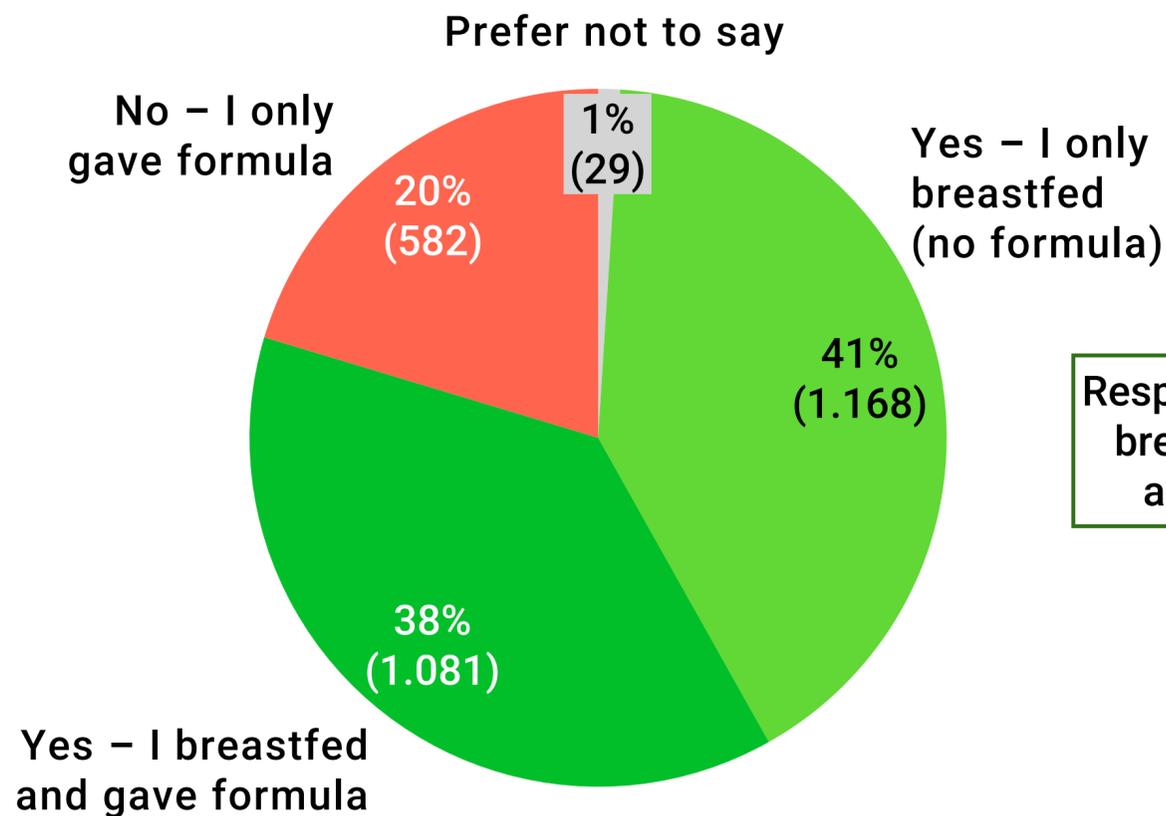
Among respondents with pregnancies of different baby sexes, most **did not notice a difference** in headache severity based on the baby's sex. Those who reported differences were **evenly divided between experiencing worse headaches with boys or with girls.**



# Respondent history of breastfeeding

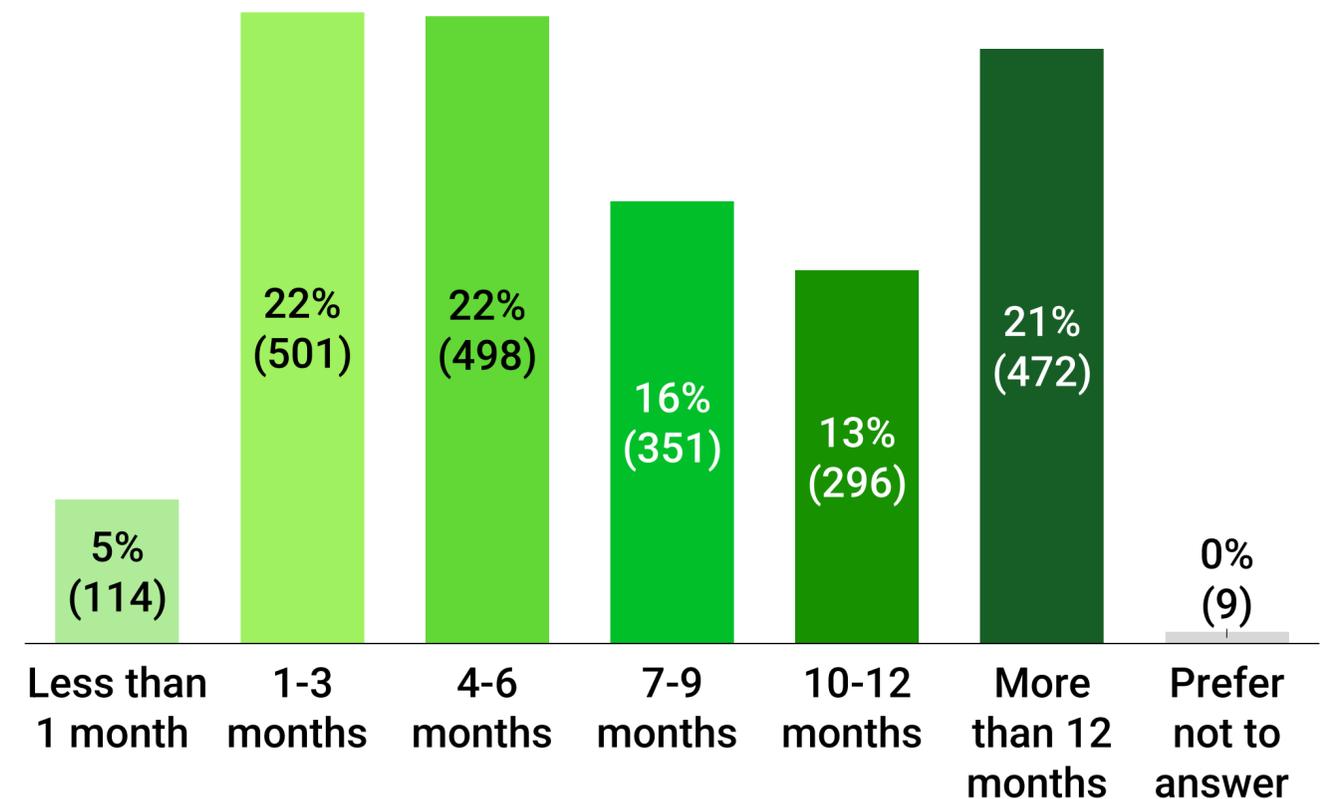
Among respondents who gave birth, **80% breastfed** in their most recent pregnancy, with a **diverse duration of breastfeeding** among respondents

For your most recent pregnancy, did you breastfeed?



Respondents who breastfed also answered...

For your most recent pregnancy, how long did you breastfeed for?



Among respondents who have given birth, **80% breastfed** in their most recent pregnancy. The **duration of breastfeeding was widely varied**, with the most common durations being 1-3 months (22%), 4-6 months (22%) and more than 12 months (21%).

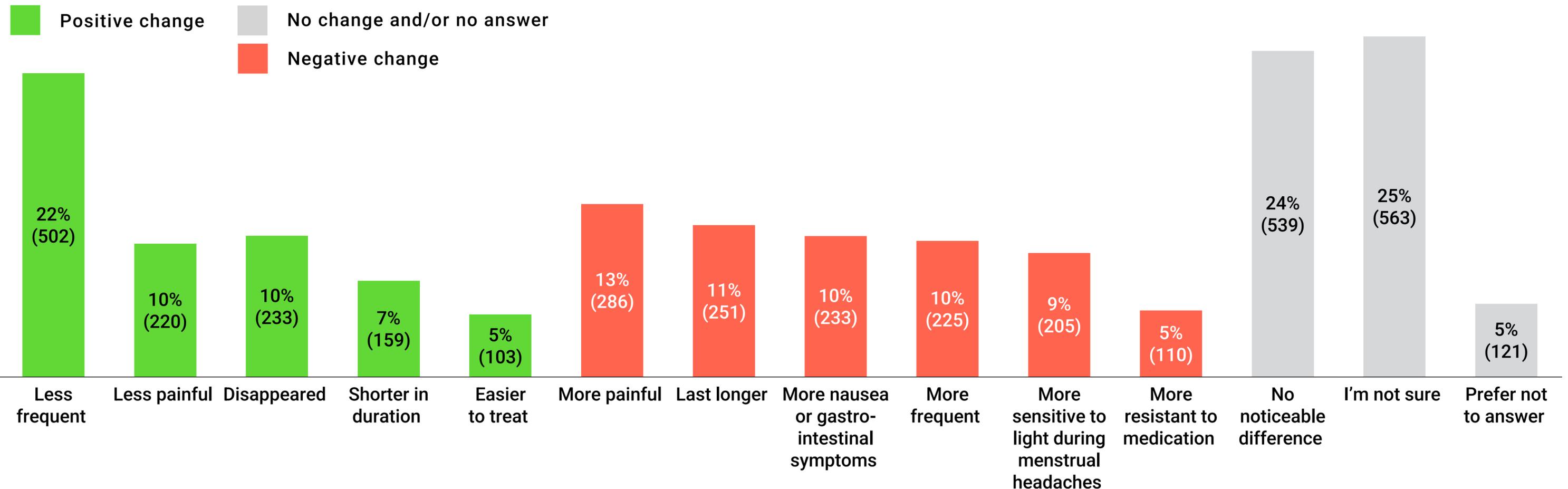
Note: Sample size for these questions: 2,860 respondents (left) and 2,241 respondents (right).



# Headache changes during breastfeeding (1/2)

Approximately one in five respondents reported **less frequent headaches** during breastfeeding months, but one in four reported **no difference**

For your most recent pregnancy, how did headache attacks change during your breastfeeding months? (Select all that apply)



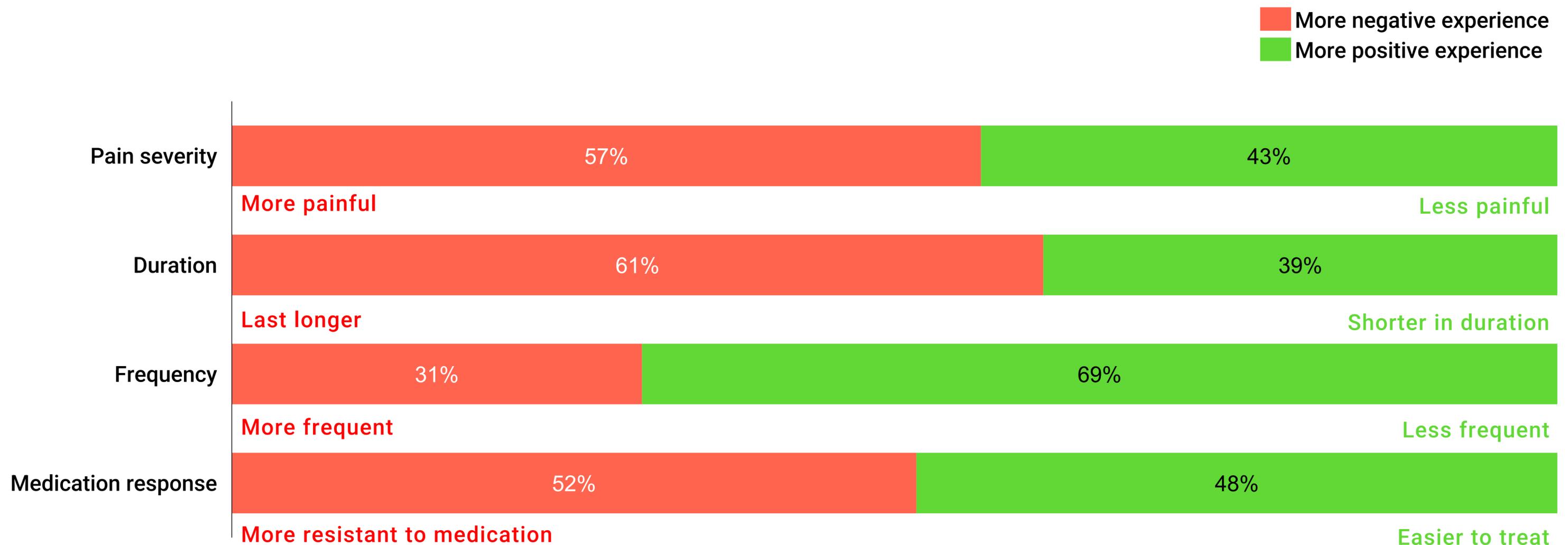
One in four respondents did not notice a change in headaches during breastfeeding. Among respondents who noticed a change, the most reported changes were **less frequent headaches** (22%), **more painful headaches** (13%) and **longer lasting headaches** (11%).



# Headache changes during breastfeeding (2/2)

2 in 3 women who reported on pain and duration said their headache attacks were **more painful** and **longer lasting** during breastfeeding months

For your most recent pregnancy, how did headache attacks change during your breastfeeding months? (Select all that apply)



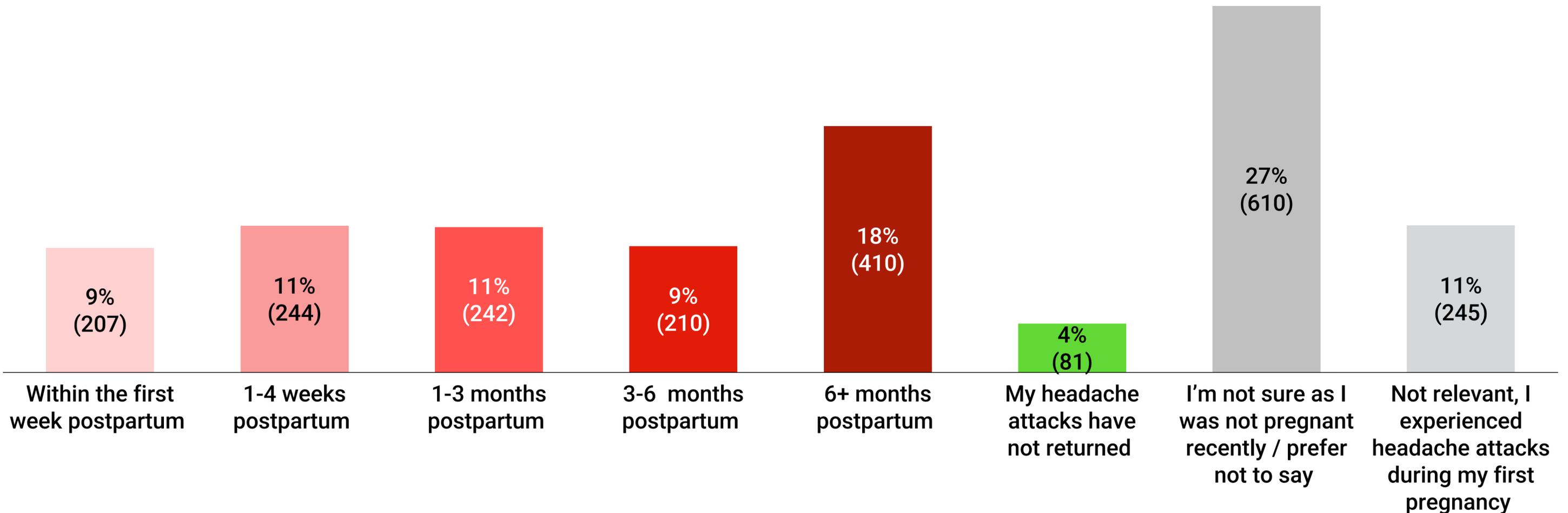
Note: Sample size for these questions: 2,249 respondents.

# Postpartum headache attacks



Only 4% of sufferers reported that their headaches did not return postpartum for their most recent pregnancy

For your most recent pregnancy, how long postpartum did headache attacks return?



**Of the sufferers reported, 58% report a return in headache attacks postpartum in their most recent pregnancy, though the onset timing was widely varied**

# Response rate per language

The highest response rate was in English

