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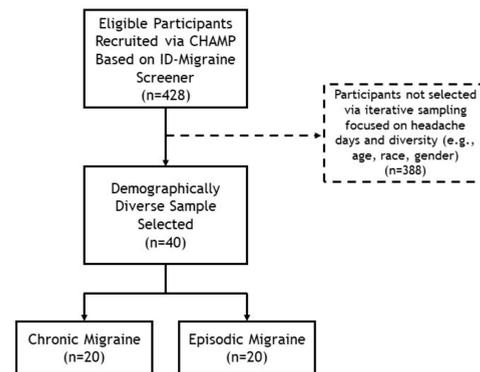
## Background & Objectives

- Migraine is associated with psychological and emotional symptoms, though these experiences are rarely examined in the different phases of the migraine cycle
- The Migraine Clinical Outcome Assessment System (MiCOAS) project is an FDA-funded project focused on integrating patient input into the development of clinical trial outcomes
- Input was gathered from people living with migraine via qualitative interviews on a range of topics including cognitive and physical functioning, ICHD-3 symptoms, and psychological and emotional symptoms. This presentation focuses on the psychological and emotional symptoms (other data are presented separately)

## Methods

- Individuals with self-reported, medically-diagnosed migraine were recruited via announcements by the Coalition for Headache and Migraine Patients (CHAMP) for participation in semi-structured qualitative interviews
- Of N=428 individuals who responded to the study screener and were determined eligible, a sociodemographically diverse sample of 40 interview participants were selected (Figure 1)

Figure 1. Flow chart of participant selection



- Participants were asked to report their “typical” experiences during migraine phases:
  - Pre-headache:** “the period of time between when your migraine attack begins up until the onset of your headache pain”
  - Headache:** “the period of time during your migraine attack when you experience headache pain”
  - Post-headache:** “the period immediately after your headache pain subsides”
  - Interictal/between attacks:** “the time period in-between your migraine attacks”

## Results

### Participant Characteristics

- Participants ranged from 21-70 years old, 77.5% were female, 67.5% were White, 22.5% Black, 10% American Indian or Alaskan Native, 7.5% Asian and 7.5% other/prefer not to answer. 22.5% were Hispanic. 55.0% were employed
- All participants currently used acute treatment(s) and 87.5% currently used preventive medication for migraine

### Emotional/Psychological Symptoms

#### Pre-headache

- 60% of participants reported irritability, 30% anxiety, and 20% depression
- Anger, apprehension, euphoria, fear, flat affect, frustration, helplessness, negative thoughts, and sadness were less frequently endorsed (2.5% to 12.5% of participants)
- Sample quote: “I would say like easily, easily agitated, like I get more aggressive with my kids, like just leave and just - I’m not patient at all or my normal self” (Irritability)*

#### Headache

- 65% of participants reported irritability, 25% depression, 20% anxiety, and 17.5% negative thoughts
- Anger, euphoria, fear, flat affect, frustration, guilt, helplessness, negative thoughts, sadness, and suicidal ideation were less frequently endorsed (2.5% to 12.5% of participants)
- Sample quote: “It’s at the point like where everything enrages me. So it could be the littlest thing, and I’m like 2,000 - not even 100 - 2,000.” (Irritability)*

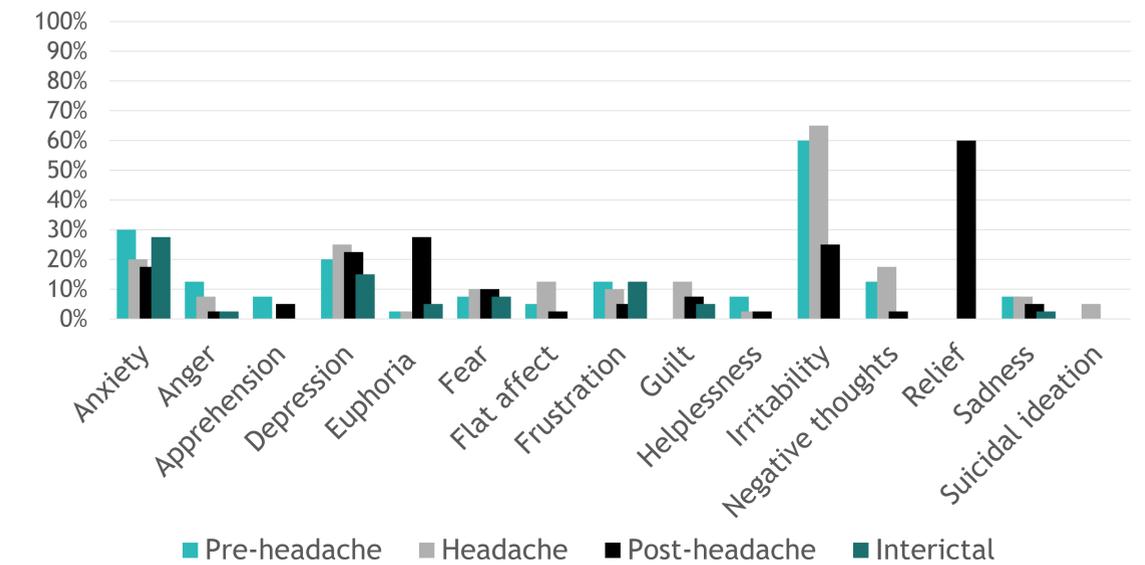
#### Post-headache

- 60% of participants reported relief, 27.5% euphoria, 25% irritability, 22.5% depression, and 17.5% anxiety
- Anger, apprehensive, fear, flat affect, frustration, guilt, helplessness, negative thoughts, sadness were less frequently endorsed (2.5% to 10.0% of participants)
- Sample quote: “Either - it’s always relief and either I’m so relieved that I am like Jell-O floppy, exhausted in a totally different way, like my - I have just completed a triathlon of migraine pain and my body is done for the day. Or - and this one is bizarre - I’m so relieved that I’m wired and I can dance a jig. And sometimes - I will mop my whole apartment and go for a walk, because woo-hoo and hooray. But it’s definitely relief.” (Relief)*

#### Interictal/between attacks

- 27.5% of participants reported anxiety, 15.0% depression, and 12.5% frustration
- Less frequently endorsed were anger, euphoria, fear, guilt, and sadness (2.5% to 7.5% of participants)
- Sample quote: “Either I’m waiting for the next one and that’s ugh, there are going to be storms next week, it’s going to be a bad week. Or I’ve had headaches for three days in a row. I wonder if that’s going to turn into a migraine.” (Anxiety)*

Figure 2. Psychological symptoms and emotional states reported by participants by phase (N=40)



## Conclusions

- Symptoms of migraine reported in this qualitative study extended beyond cardinal and/or diagnostic symptoms and included a variety of primarily undesirable *and* some desirable emotional states and psychological symptoms
- These experiences were reported to occur during all phases of the migraine experience including interictally
- The pre-headache phase was largely characterized by anxiety, irritability/impatience, and anger, while the post-headache phase also included feelings of relief and euphoria
- Depression and anxiety were reported by roughly similar percentages of participants in all stages of attacks as well as interictally
- Emotional and psychological symptoms can be bothersome and impactful to people living with migraine
- It is important to consider symptoms beyond cardinal symptoms and to ask patients about their experience during all phases of attacks, as well as between attacks, to truly understand and capture the complete impact of migraine

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