# Mapping out the patient journey of generalized myasthenia gravis: Insights and challenges

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# Introduction

- Generalized myasthenia gravis (gMG) is a rare, autoantibody-driven disease; it causes fluctuating, fatigable, often debilitating muscle weakness<sup>1,2</sup>
- It is well understood that the variability and unpredictability of gMG can negatively affect patients' quality of life;<sup>3</sup> however, there is limited research characterizing the patient experience
- Patient journey maps can be used to visualize the patient experience and provide healthcare providers (HCPs) with information to help optimize care<sup>4</sup>
- The aim of this study was to develop a patient journey map and further characterize the experience of living with gMG

# Methods

- A Johnson & Johnson Patient Engagement Research Council (PERC) program was established to gather the perspectives of people living with and affected by gMG. PERCs represent diverse groups of disease-aware adults with chronic health conditions who provide insights to inform research<sup>5</sup>
- US adults with a self-reported gMG or ocular myasthenia gravis diagnosis were recruited to participate in a 13-question online survey (Figure 1). Caregivers providing support to patients meeting these criteria were also included in the study
- Survey topics were selected based on prior research and publications regarding the patient journey and included identification/first symptoms, diagnosis, treatment, HCP relationships, and mental health impacts
- Survey responses guided and facilitated four 2-hour virtual focus group discussions held in December 2023
- Discussions were moderated by a professional research specialist using a semi-structured discussion guide to elicit open and honest feedback and opinions
- Sessions were audio-recorded and transcribed; they were then coded, analyzed, and distilled into key insights
- Key patient and caregiver insights from the pre-session survey and focus group discussions were used to develop a patient journey map
- Additional insights about HCP access and mental health impacts during the patient journey were analyzed to further characterize the experience of living with gMG

Were you/your loved one

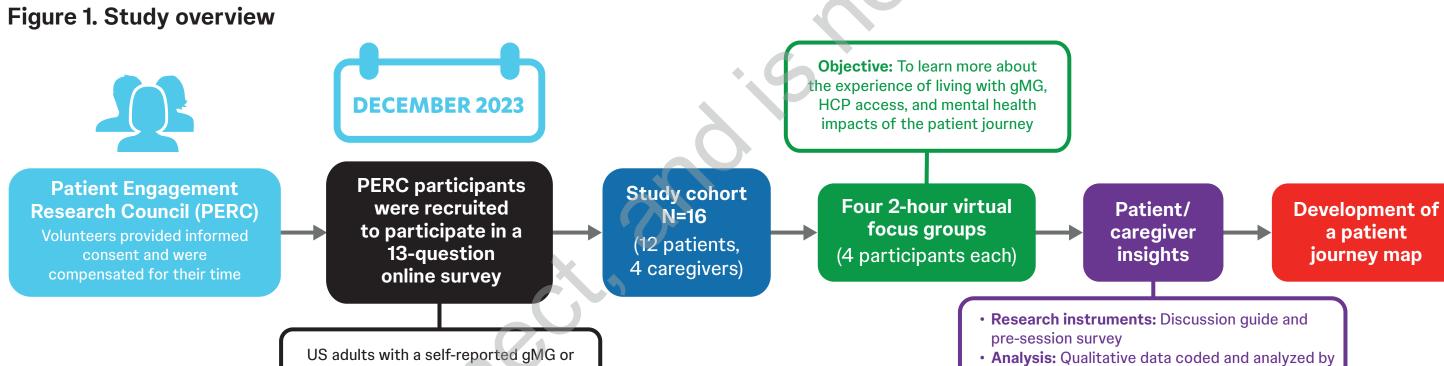
misdiagnosed before arriving at your

diagnosis of gMG?

No. of participants

ocular MG diagnosis, or their caregivers

gMG, generalized myasthenia gravis; HCP, healthcare provider; MG, myasthenia gravis



# Results

# Participant characteristics

- Of 16 total participants, 12 were patients and 4 were caregivers
- The highest proportion of participants were White, identified as female, were aged 50-59 years, and had a bachelor's degree (Table 1)

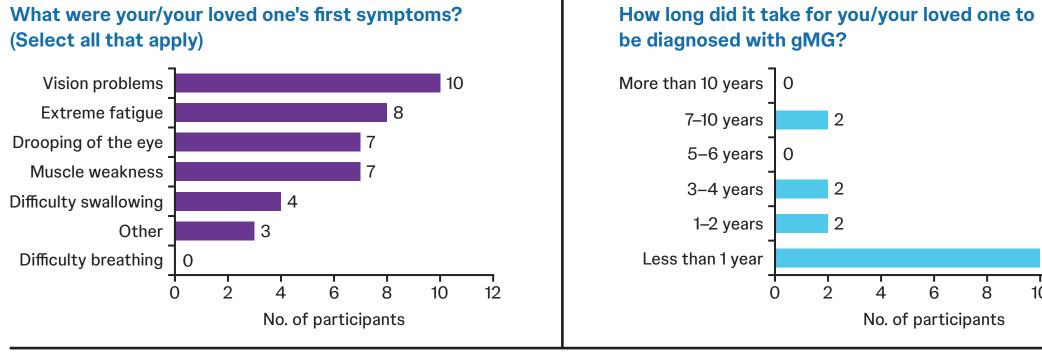
Table 1. Participant characteristics (N=16)

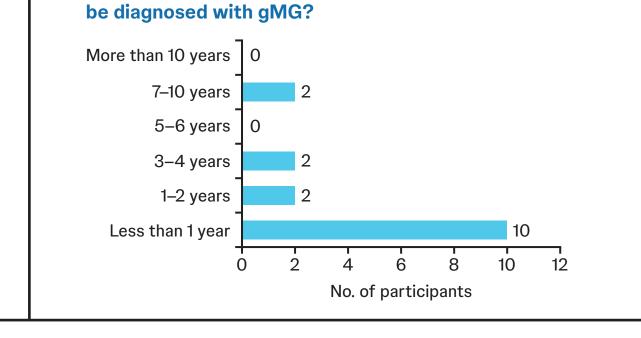
Characteristic	Participants, n (%)
Age range, years	
30–39	2 (13)
40–49	3 (19)
50–59	6 (38)
60–69	3 (19)
70+	2 (13)
Gender	
Non-binary	1 (6)
Male	7 (44)
Female	8 (50)
Race/ethnicity	
Native Hawaiian/Other Pacific Islander	1 (6)
Hispanic or Latino	1 (6)
Black or African American	4 (25)
White	10 (63)
Education level	
High school diploma	4 (25)
Technical or trade school	1 (6)
Some college	2 (13)
Bachelor's degree	6 (38)
Graduate degree	3 (19)

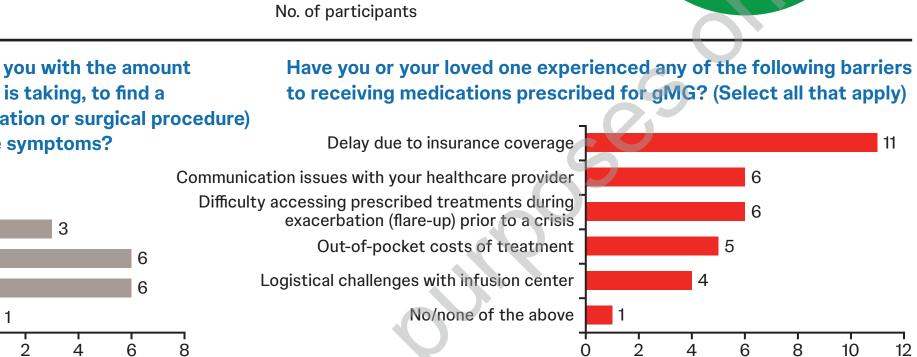
# Patient journey

- The pre-session survey results for identification (Figure 2A), diagnosis (Figure 2B), and treatment (Figure 2C) topics were validated by the focus group discussions; common key insights from the survey and the focus groups were used to develop a patient journey map (Figure 3)
- Key insights included challenges of misdiagnosis, delays related to finding HCPs who have knowledge of gMG, insurance policy barriers, and the trial-and-error phase of finding treatments that work for the individual
- · Factors deemed important for improving the patient experience included learning to advocate for yourself/your loved one, identifying triggers, finding support from fellow patients or caregivers, and identifying physical limitations and expressing them to others
- Participants suggested mapping the patient journey in a non-linear format to reflect the cyclical nature of their treatment planning, receiving treatment, and monitoring of gMG
- Changing HCPs, experiencing new symptoms, and changing treatments were noted as events that can cause participants to revisit previous stages of the patient journey

### Figure 2. Pre-session survey results for identification (A), diagnosis (B), and treatment (C) topics **A** Identification **B** Diagnosis







# How satisfied are you with the amount of time it took, or is taking, to find a treatment (medication or surgical procedure) that improves the symptoms? Very satisfied ( Very unsatisfied

No. of participants

<sup>a</sup>Insight from the pre-session survey. **gMG**, generalized myasthenia gravis; **HCP**, healthcare provider.

**C** Treatment

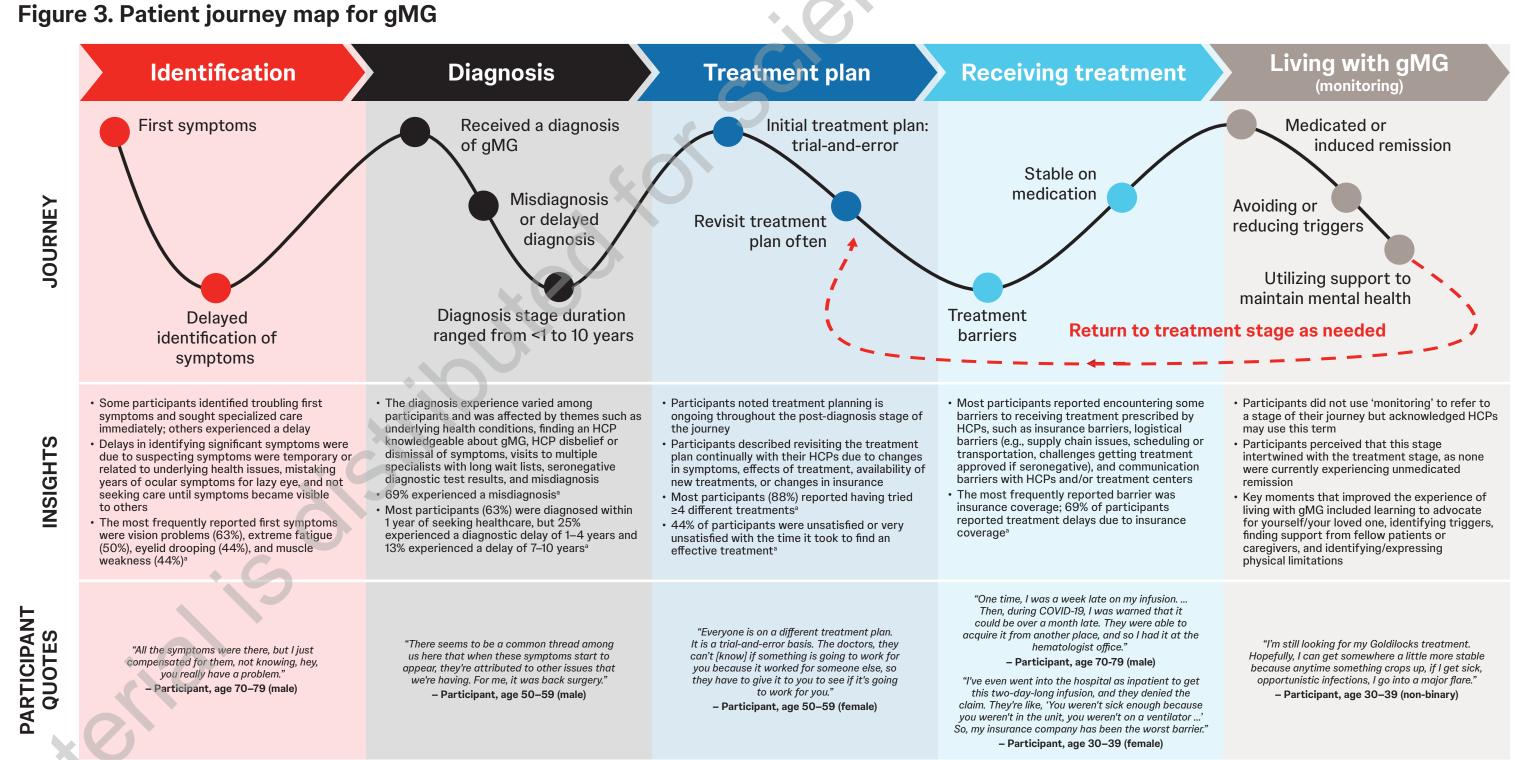
gMG symptoms?

More than 12

How many prescribed treatments

gMG, generalized myasthenia gravis.

have you/your loved one tried to improve



No. of participants

### **HCP** access and mental health impacts

• The majority of patients (13/16 [81%]) experienced disbelief or dismissal by HCPs during their journey (Figure 4A), with stories centered around themes such as lack of gMG awareness among HCPs and suggestions that symptoms were related to anxiety (Figure 4B)

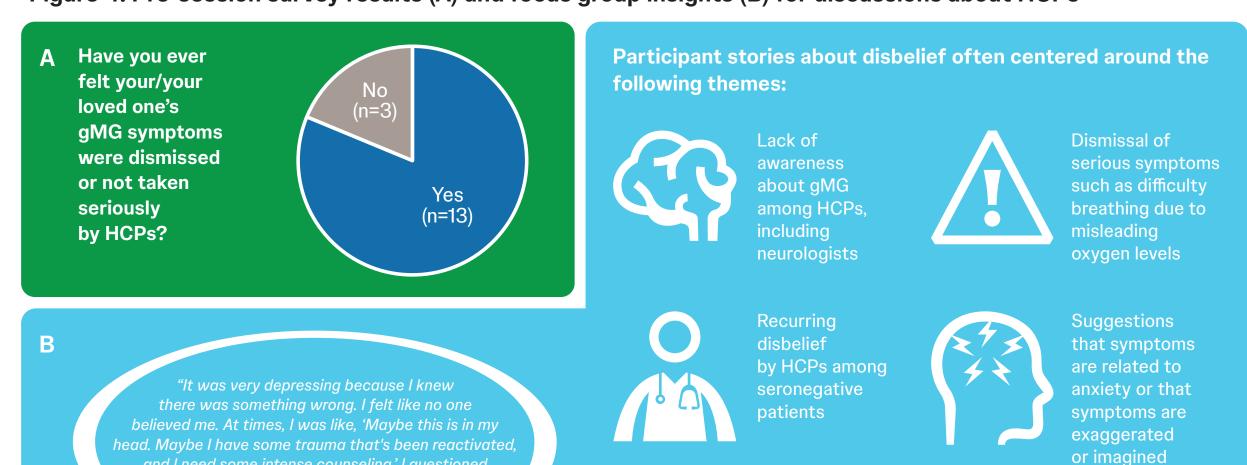
a research specialist

Most of the patients who did not feel dismissed by HCPs presented

with a combination of visibly drooping eye, double vision, and falls due to

- Most participants (15/16 [94%]) reported that they agreed or strongly agreed that living with gMG was emotionally challenging and that they felt persistent fear or anxiety about having a gMG crisis (Figure 5A)
- Participants emphasized the importance of protecting their mental health through self-care and support groups (Figure 5B)

### Figure 4. Pre-session survey results (A) and focus group insights (B) for discussions about HCPs

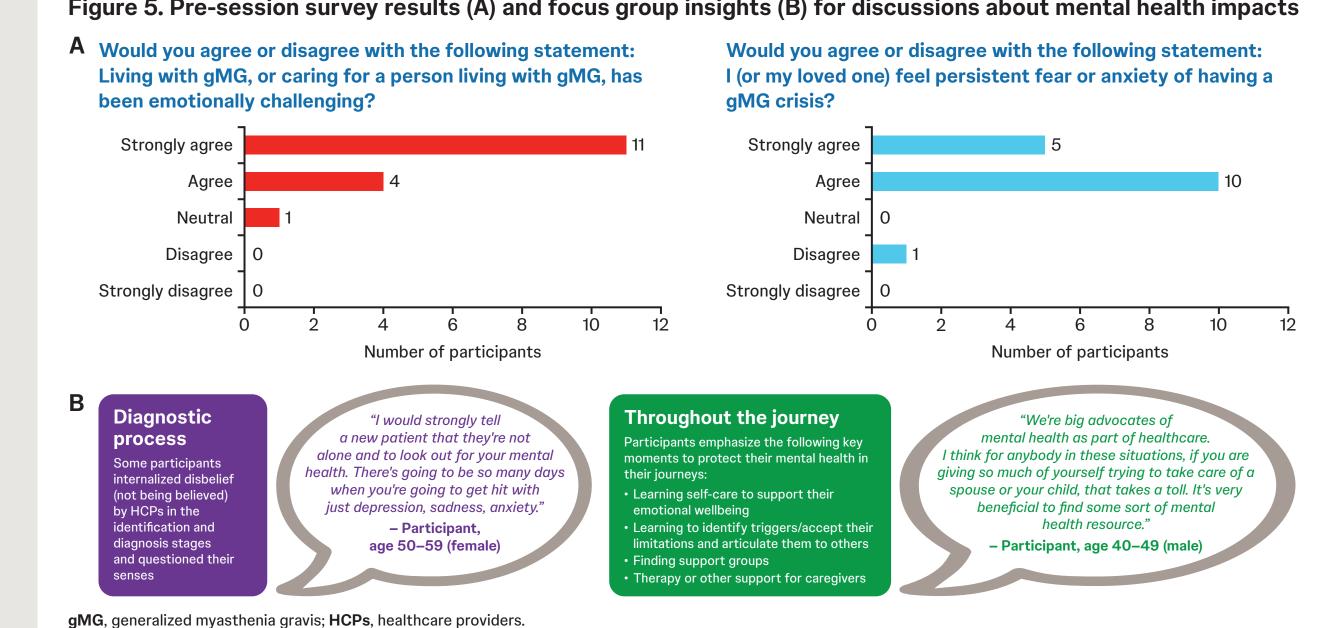


gMG, generalized myasthenia gravis; HCPs, healthcare providers.

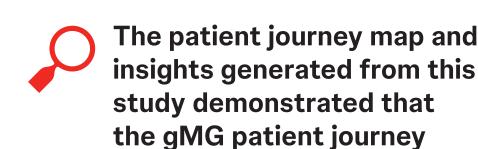
was there really something wrong with me?

Participant, age 30–39 (female)

# Figure 5. Pre-session survey results (A) and focus group insights (B) for discussions about mental health impacts



# Key takeaway



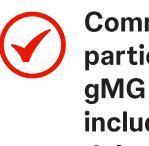
challenging

# Conclusions

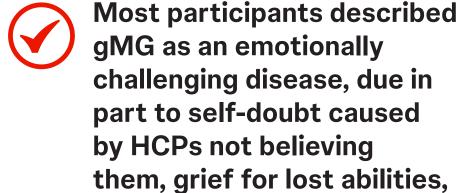


This study provided a visualization of the patient journey and detailed insights into the experience of living with gMG

is cyclical and emotionally



Common challenges participants faced in the gMG patient journey included misdiagnosis or delayed diagnosis, insurance barriers, and the trial-anderror nature of finding effective treatments



challenging disease, due in part to self-doubt caused by HCPs not believing them, grief for lost abilities, and the emotional toll on caregivers of patients with gMG

Implementing self-care practices, finding support groups, and learning to identify limitations and triggers and express them to others were strategies participants utilized to

improve their patient

mental health

journey and protect their

Leveraging these insights may help to improve gMG management and patient outcomes, as US patients with gMG continue to experience substantial disease instability despite currently available treatment options

# Acknowledgments

Sponsorship for this study was funded by Johnson & Johnson. Medical writing and editorial support were provided by Danielle Dalechek, PhD (Twist Medical), and Margaret Van Horn, PhD, CMPP (Johnson & Johnson Scientific Communications), and were funded by Johnson & Johnson.

# Disclosures

ZC, LJ, NC, LS, and SR are employees and stockholders of Johnson & Johnson. MAT was an employee and stockholder of Johnson & Johnson at the time of the study. KGG has received consulting honoraria from Alexion, argenx, UCB, and Amgen; and she has received speaking honoraria from Alexion and argenx. **KG** reports participation in advisory board meetings for UCB, Kyverna, Amgen, and Johnson & Johnson. **BM** reports participation in advisory board meetings for Sanofi, argenx, UCB, Johnson & Johnson, Amgen, and Ultragenyx; and has acted as a speaker for Sanofi, UCB, and Johnson & Johnson.