# **Characterising Patient and Caregiver Experiences Resulting From Prolonged Seizures**

Danya Kaye<sup>1</sup> Catherine Cooles<sup>2</sup> Cheryl Hudson<sup>3</sup> Cédric Laloyaux<sup>4</sup> Anna Alicja Lisowska<sup>5</sup> Judith Luker<sup>3</sup> Manuel Toledo<sup>6</sup> Matthew C Walker<sup>7</sup> Leonie Wollscheid<sup>8</sup> Kay Fisher<sup>9</sup>

- 1. UCB, Morrisville, NC, USA
- 2. Patient author; London, UK
- 3. UCB, Slough, UK 4. UCB, Brussels, Belgium
- 5. Patient author; EpiHero Foundation, Warsaw, Poland 6. Epilepsy Unit, Neurology Department, Vall d-Hebron University Hospital, Barcelona, Spain
- 7. UCL Queen Square Institute of Neurology, University College London, London, UK
- 8. Patient author; International Bureau for Epilepsy Youth Team; Epilepsie Empowerment Deutschland e.V., Karlsruhe, Germany
- 9. Experience Engineers, Gerrards Cross, UK



**E** CONCLUSIONS

PwE and caregivers across Europe experience significant short- and long-term negative impacts on quality of life from PS. This highlights the importance of having more tools to support seizure management and control. This should include systematic adoption of seizure action plans paired with appropriate acute medications, including interventions for rapid and early seizure termination.

### **Background**

- Until recently, the term 'prolonged seizure' (PS) lacked a clear definition and was often used interchangeably with 'status epilepticus'.
- Recently, an expert working group reached consensus on the definition of PS: 2 minutes for prolonged absence seizures and the convulsive phase of bilateral tonic-clonic seizures, and 5 minutes for prolonged focal seizures.<sup>1</sup>
- Studies have reported negative impacts of epilepsy on the quality of life (QoL) of people living with epilepsy (PwE) and their caregivers; however, the specific impact of PS on OoL is not well understood.

### **Objective**

• To describe the unmet needs of PwE with PS and their caregivers across six European countries and assess the impact of PS on QoL.

## **Methods**

- Quantitative and qualitative research was conducted across six European countries (United Kingdom, Germany, Spain, Italy, France, and Poland) from June through August 2024.
- A mixed methods approach was used, including a short quantitative web survey and qualitative semi-structured interviews (60 minutes).

### **PARTICIPANTS**

- PwE ≥18 years who had experienced ≥3 PS (i.e. those lasting ≥2 minutes) within the past 3 years, without any severe comorbidities.
- Adult caregivers of PwE with PS.

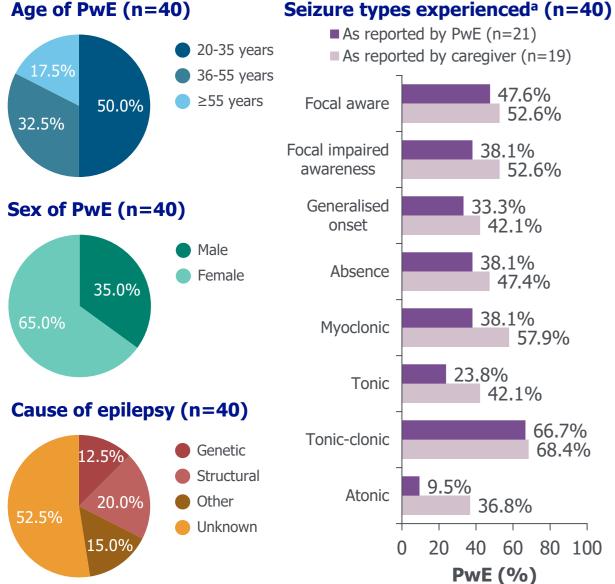
### **ANALYSES**

- The interviews were guided by interpretative phenomenological analysis to identify themes, attitudes, behaviours, and beliefs.<sup>2</sup>
- A qualitative inductive approach was also used for more in-depth and open-minded content.
- An iterative approach was taken by a single interviewer who conducted, transcribed, and analysed the interviews, refining the methodology as new insights were gathered; a second analyst assisted with verifying the themes to ensure consistency of interpretation.

### Results

### RESPONDENT DEMOGRAPHICS

• A total of 50 participants (25 PwE; 25 caregivers) participated in the study, and 40 participants completed the survey.



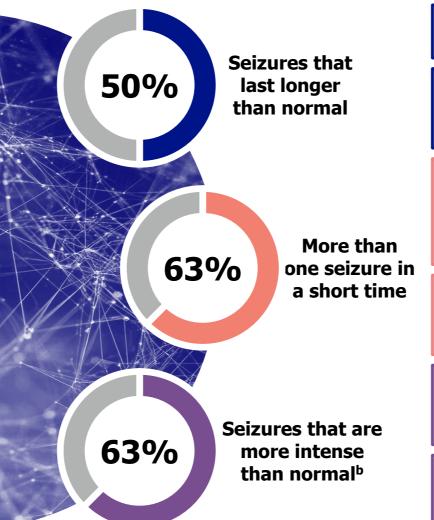
<sup>a</sup>Participants could have reported multiple seizure types. PwE, person living with epilepsy.

- Ten of 21 PwE (47.6%) reported experiencing >50 seizures per year.
- Nine of 21 PwE (42.9%) reported an average seizure duration of 1-2 minutes and 5 (23.8%) reported an average duration of 2-5 minutes.

#### PROLONGED SEIZURES ARE PARTICULARLY CONCERNING

- 50% of participants reported that seizures lasting longer than usual are particularly worrying; 63% of participants reported that seizures that were more intense than normal or more than one seizure in a short period of time were also particularly troubling.
- PwE and caregivers perceived prolonged seizures differently based on individual experiences, including different seizure durations (>30 seconds to >5 minutes), symptoms experienced during or after the seizure, seizure types, seizure frequency, and risk of injury.

### Factors that participants reported as particularly concerning<sup>a</sup> (n=40)



'The longer it goes on, the more damaging it might be and the more concerned we become. '- Caregiver of PwE with PS

'The longer the seizures are, the longer the recovery phase takes. In the past, with the big seizures, he also had sore muscles for days, muscle pain, etc., migraine, sensitivity to light for days. '- Caregiver of PwE with PS

'Clusters are the worst – you feel the strength completely drain from your body – no strength in my legs or able to move following these clusters. I was kept in hospital; it was the worst experience of my life – I was fearful that this was the end. I thought that they would never stop. '- PwE with PS

'It is machine-like, one after the other. Seizure, break, seizure, break. Like that all the time. It can last for a very long time. It could go on for an hour or even longer for such seizures - could be 20, 30, 40 seizures.' - PwE with PS

'If I could have one thing to help, it would be something to make it less intense, less severe because of how this impacts him afterwards – he is out of it really for 3-4 days, but the cumulative impact is important too. '- Caregiver of PwE with PS

'When I say 'more violent' it relates mainly to the aftermath because I don't feel the seizures per se, it's mainly upon waking up I feel the difference.' – PwE with PS

Participants could choose more than one option; bMany of these participants mentioned intensity of the post-ictal state and recovery. PS, prolonged seizures; PwE, person living with epilepsy.

### **IMPACT OF PROLONGED SEIZURES**

• For most participants, the impact of PS was an extreme version of problems they face from seizures in general, but there were some specific areas of exacerbated impact.

### Impact on seizure control

- PS make PwE/caregivers more aware of their lack of control over seizures
- PS present greater risk of physical injury (especially if in an unfamiliar environment)
- PS increase inability to control breathing

### Impact on mental health

- PS increase anxiety, stress, and risk for depression, which can trigger further seizures for PwE
- Mood swings before/after PS are more pronounced
- Confusion and memory loss
- persist after a PS Fears/worries about immediate impacts are more
- PS also increase fear of long-term brain damage

extreme with PS

### **Impact on independence**

#### PS are more likely to require interventions, making it harder for PwE to live alone and drive, and heightening feelings of being a burden

 PwEs' perceptions and concerns over their lack of seizure control, memory loss, recovery time, and stigma in work settings negatively impact their careers

### **Impact on social life**

- PwE/caregivers often limit social life due to risk and fear of PS, as they feel more confident in familiar environments
- PwE also report PS having a negative impact on their romantic and parental relationships as well as friendships
- Planning is difficult due to the condition's unpredictability
- Impact on family planning,
- especially for young women

'He feels he is really missing out on things ... he has had to stop work and still wants to do much more with his life, but the possibility of a long seizure, maybe needing an ambulance, stops him from experiencing those things.'-Caregiver of PwE with PS

### **Conclusions**

- PwE and caregivers across Europe emphasize seizure duration as a particularly troubling factor, alongside perceived seizure intensity and occurrence of seizure clusters.
- PwE and caregivers experience significant short- and long-term negative impacts on QoL from PS.
- This highlights the importance of having more tools to support seizure management and control.
- This should include systematic adoption of seizure action plans paired with appropriate acute medications, including interventions for rapid and early seizure termination<sup>1</sup>.

### References

1. Pina-Garza JE, et al. Epileptic Disord 2024;26(4):484-497. 2. Larkin M, et al. Qual Res Psychol 2019;16(2):182-198.

UCB-sponsored. UCB was involved in the design of the study, the collection, analysis, and interpretation of data, and review of the poster. The authors thank the patients and their caregivers who contributed to this study. The authors acknowledge Bobby Jacob, PharmD, MPH (UCB, Smyrna, GA, USA) for managing the development of the poster, and Michaela Fuchs, PhD, CMPP (Envision Spark, an Envision Medical Communications agency, a part of Envision Pharma Group, Horsham, UK) for writing assistance, which was funded by UCB. Author contributions: D Kaye and K Fisher designed the study and analysed/interpreted the data. All authors critically reviewed the poster and approved the final version for presentation. Author disclosures: D Kaye, C Hudson, C Laloyaux, and J Luker are employees of UCB and have received stocks from their employment. C Cooles receives speaker's honoraria for being a UCB epilepsy advocate. AA Lisowska has received grants for EPI-HERO foundation from Accord Healthcare, Angelini Pharma, and UCB. M Toledo receives consulting honoraria and research funding from Angelini Pharma, Arvelle Therapeutics, Bial, Eisai, Esteve, GW Pharmaceuticals, Jazz Pharmaceuticals, Neuraxpharm, Neuroelectrics, Takeda Pharmaceuticals, and UCB. MC Walker has consulted for Angelini Pharma, EpilepsyGTx, and SEER and has received honoraria from Angelini Pharma, BioQuest, Eisai, and UCB. L Wollscheid reports no conflicts of interest. K Fisher was a paid consultant to UCB for the conduct of the interviews.

'These longer ones are more extreme – the worst I have

experienced, the mood swings beforehand were extreme ... On the day of the seizure, I will be having anxiety-based symptoms all day

... and I become scared — it causes me to panic more in anticipation,

which makes things worse of course.' – PwE with PS



For a copy of this poster, use your smartphone to scan the QR code or contact UCBCares® Phone: +32 2 559 92 00

**36th International Epilepsy Congress** Lisbon, Portugal | 30 August—3 September 2025

