Characterizing fatigue in US, European and Latin-American adults with relapsing multiple sclerosis: a real-world study conducted using a novel disease specific scale



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## INTRODUCTION

Relapsing multiple sclerosis (RMS) is an inflammatory demyelinating disorder of the central nervous system and the most common progressive neurologic disease of young adults worldwide<sup>1</sup>.

Fatigue is one of the most common symptoms of RMS and one of the main causes of patients' quality-of-life (QoL) impairment<sup>2</sup>. Considering its subjective aspect, using MS-specific patient reported outcomes to characterize it would grant a better understanding of its impact on patients' QoL.

### **OBJECTIVE**

This study aimed to measure fatigue in RMS patients from multiple countries using the Fatigue Symptoms and its impact Questionnaire-Relapsing Multiple Sclerosis (FSIQ-RMS).

## **METHOD**

- Non-interventional prospective study conducted via an online survey (Carenity platform) 3.
- 722 ambulatory adult patients with RMS were recruited:
  - In the United States (US), n=300, from March to September 2020
  - In Europe (EU) (United Kingdom, France, Spain, Germany, Italy), n=362, from November 2020 to March 2022
  - In Latin America (LATAM) (Mexico, Colombia), n=60, from December 2021 to March 2022
- They completed demographic and clinical questionnaires as well as the FISQ-RMS.
- The 20-item FSIQ-RMS assesses fatigue symptoms, with a severity rated based on the mean of the 7-day symptom assessment, and its impact on 3 domains: physical, cognitive/emotional and coping. The scores range from 0 to 100 (higher score indicates greater severity).

Fig 1: Design: A non-interventional prospective study

#### Day 1 (Mandatory)

- Screening criteria
- Sociodemographic and clinical characteristics
- Fatigue characteristics
- Impact on professional life
- Expectations and solutions to manage fatigue

FSIQ-RMS symptom items (7)

#### Day 2 to 6 (At least 2/5)

• FSIQ-RMS symptom items (7)

#### Day 7 (Mandatory)

- FSIQ-RMS symptom items (7)
- FSIQ-RMS impact items (13)7-day lookback on fatigue
- symptomsCurrent relapse
- Quality of sleep
- Unusual factors influencing fatigue

## **RESULTS**

- Mean age of respondents: 43 y/o
- Gender:
- US: 88% women
- EU: 86% women
- LATAM: 77% women
- Most patients were not relapsing at the time of the survey

Fig 2: Percentage of US patients relapsing or not. (Similar figures in EU and LATAM (not relapsing

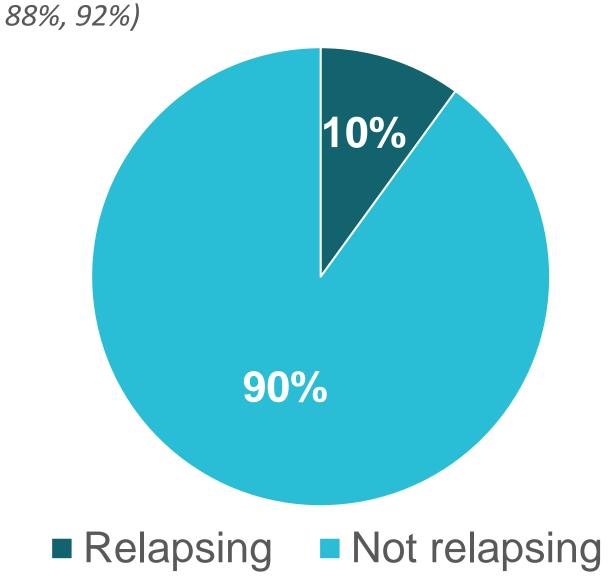
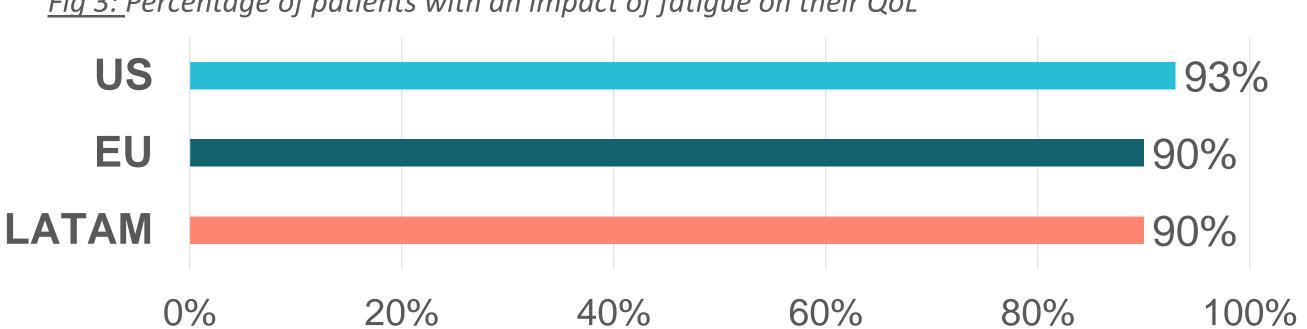
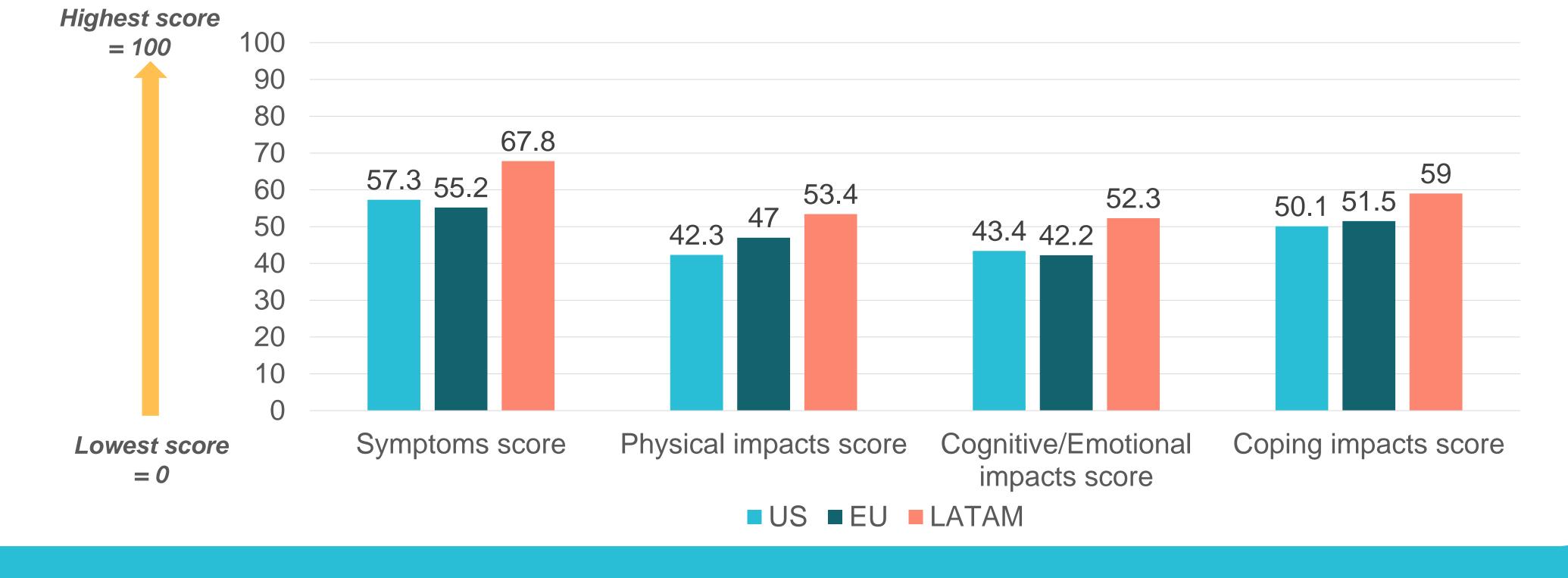


Fig 3: Percentage of patients with an impact of fatigue on their QoL



- Almost all patient (>90%)
  reported an impact of fatigue on
  their quality of life
- Results of **FISQ-RMS** indicated **high levels of fatigue** for patients with mean scores above 55 for fatigue symptom domain.
- Among the **fatigue-related impacts of RMS**, « coping impact » (motivation, napping, adapting plans...) was the domain with the **highest impact scores**

<u>Fig 4:</u> Symptoms score, physical impacts score, cognitive/emotional score and coping impacts score for US, EU and LATAM patients according to FSIQ-RMS tool.



## CONCLUSIONS

- Even outside of relapses, almost all RMS patients reported their quality of life being impacted by fatigue.
- The use of a disease-specific tool, the **FISQ-RMS**, allowed a **better characterization** of this fatigue and its impact on three domains: **physical, cognitive/emotional and coping strategies.**
- The FISQ-RMS results indicated an overall high impact of fatigue on all domains assessed.
- Results were mostly **similar** across **US**, **EU** and **LATAM** respondents.

# REFERENCES

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