Real-World Disease Burden and Treatment Experiences of Patients With MS in the US: Results From the vsMS™ Survey

Ann D Bass¹, Bart Van Wijmeersch², Aaron Boster³, Lori Mayer⁴, Mathias Mäurer⁵, Matt Mandel⁶, Kersten Sharrock⁷, Colin P Mitchell⁶, Barry A Singer⁸

¹Neurology Center of San Antonio, San Antonio, TX, USA; ²Rehabilitation & MS-Centre Overpelt, Hasselt University, Hasselt, Belgium; ³OhioHealth Neurological Physicians, Columbus, OH, USA; ⁴Central Texas Neurology Consultants, Round Rock, TX, USA; ⁵Klinikum Würzburg Mitte gGmbH, Würzburg, Germany; ⁶Sanofi, Cambridge, MA, USA; ⁷Sanofi, Naarden, The Netherlands; ⁸MS Center for Innovations in Care, Missouri Baptist Medical Center, St Louis, MO, USA

OBJECTIVE

 To evaluate the impact of MS, beliefs about MS, and treatment experiences of MS patients in the US subpopulation of vsMS participants

INTRODUCTION

- vsMS is a global, electronic, anonymous survey of patients living with MS and care partners, designed to evaluate the impact of MS on their daily lives and their experiences with treatment
- Disability associated with relapse is a primary contributor to the burden of MS, but other factors such as fatigue, cognitive impairment, and emotional and social burden also disrupt the day-to-day lives of those living with the disease^{1,2}
- Treatment guidelines recommend use of an appropriate disease-modifying therapy (DMT) for MS,³ the primary goal being to reduce the relapse rate and mitigate long-term disease progression and cumulative disability^{4,5}
- A number of studies have investigated DMT use from the patient's viewpoint⁶⁻⁹; however, systematic data on patient perspectives of their treatment experience, as well as their beliefs about MS and the impact of the disease, have been lacking
- Greater understanding of patients' views on the burden and treatment of MS in a real-world setting may improve overall patient care and treatment outcomes

METHODS

- The development of the survey questionnaire was overseen and guided by a steering committee of expert MS clinicians
- The survey was conducted during July and August 2015, and included patients with RRMS and care partners living in Australia, Canada, France, Italy, Spain, the UK, and the US
 Data reported here are from the US subpopulation
- Criteria for participation for individuals with MS included: age ≥18 years, literacy in the local language, and diagnosis of RRMS
- · Participants completed a 20-minute electronic survey
- Individuals were identified and recruited via survey panels managed by a third party (Kantar Health, New York, NY)
- Survey findings for care partners are reported elsewhere¹⁰

RESULTS

Participant Characteristics

- Of the 1075 participants with RRMS who completed the vsMS survey, 605 (56.3%) were from the US
- Mean age at symptom onset for US participants was 32.3 years
- Time since MS diagnosis
- Within the past <5 years: 14.7%
- Within the past 5 to <10 years: 22.6%
- Within the past 10–15 years: 24.0%
- Within the past >15 years: 38.7%Relapses in previous 12 months:
- Relapses in previous 12 n – None: 51.7%
- None: 51.7%
 1 relapse: 26.6%
- 2 relapses: 11.4%
- >2 relapses: 10.2%

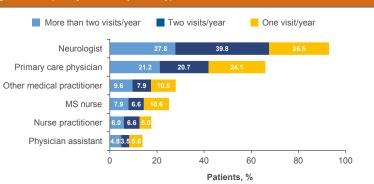
- CONCLUSIONS
- This survey highlights that patients value healthcare visits, but a majority delayed starting an MS DMT after diagnosis even though 68% were recommended by their neurologist to start treatment immediately, and 86% agreed that disease progression is more likely if treatment is delayed
- Patients considered reduction of disease activity and improved mobility very/extremely important factors when choosing a DMT, but after starting therapy, fewer patients expected to have improvements in mobility

RESULTS

HCP Visits and Current Therapies

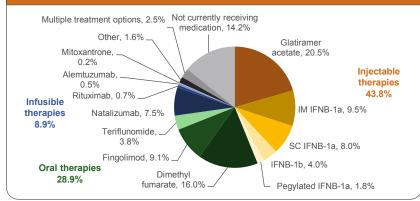
- 95.7% of patients agreed that regular visits to a HCP were important
- Patients reported visiting HCPs frequently for their MS (Figure 1)

Figure 1. Frequency of Visits by HCP Type



- 85.8% of participants with RRMS were currently receiving a DMT; 14.2% were not currently receiving medication (Figure 2)
- 67.6% of participants reported that their neurologist suggested to start treatment immediately after diagnosis
 - Only 38.2% of participants actually began treatment immediately following diagnosis
- Of patients not starting treatment immediately, 31.9% delayed less than 1 year, 15.2% delayed from 1 to less than 2 years, and 52.9% delayed 2 years or more

Figure 2. RRMS Patients' Current Therapies



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Reasons for not starting treatment immediately following diagnosis included: no medications available when diagnosed (16.9%), neurologist recommended waiting before starting treatment (13.6%), and several factors relating to a lack of understanding the risks of not treating MS with DMT: patients did not think treatment was needed (12.5%), patients wanted to see how they felt without taking it (10.2%), patients wanted to try alternative therapy or lifestyle modification (10.3%), and patients did not like the way the medication was administered (6.9%)

- Efficacy, particularly regarding slowing disease progression and preventing MRI lesions, and safety, were the main considerations driving choice of DMT (Figure 3)
- Patients' expectations for therapy included reduction or prevention of disease worsening, and retaining function; fewer patients expected improvements in symptoms or mobility (Figure 4)

Figure 3. Factors When Considering Different MS Treatments

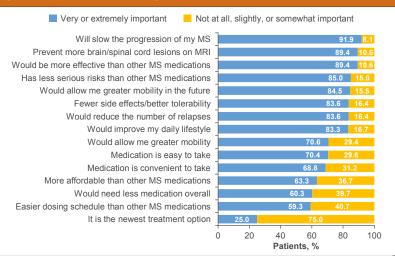
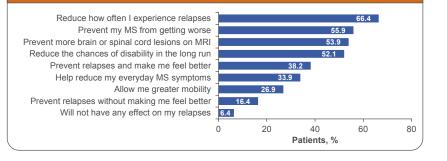


Figure 4. Patients' Expectations of MS Treatments After Starting Therapy



Acknowledgments and Disclosures

The authors and Sanoti would like to thank the patients for their participation in the vsMS survey. This poster was reviewed by Darren P Baker, PhD, Ericka Bueno, PhD, Steven Cavalier, MD, Nadia Daizadeh, PhD, Andreas Lysandropoulos, MD, and Laura Saltonstall, MD, of Sanoff. Enditorial support for the poster was provided by David R Thomas, PhD, and Valerie P Zediak, PhD. of Envision Scientific Solutions, and was funded by Sanoti. Funding for the vsMS survey was provided by Sanoti. **ABass**: Consulting fees/fees for non-CNE services from commercial interest or their agents/grant and research support (Biogen, Malinkordt, Novartis, Roche-Senoten, Novartis, Roche-Senoten, Novartis, Roche-Senoten, Novartis, Sanoti, and Teva). **WM:** Consulting fees and/or fees for non-CNE services from commercial interest or their agents (Biogen, EMD schering, Biogen, Merck-Serono, Novartis, Sanoti, and Teva). **WM:** Consulting fees and/or fees for non-CNE services form commercial interest or their agents (Biogen, EMD schering, Biogen, Merck-Serono, Novartis, Roche, Sanoti, and Teva). **WM:** Expression and travel grants, honoraria for MS expert advice and speaker's fees (Bayer-Schering, Biogen, Merck-Serono, Novartis, Sanoti, and Teva). **WM:** Expression and travel grants, honoraria for MS expert advice and speaker's fees (Bayer-Schering, Biogen, Merck-Serono, Novartis, Sanoti, and Teva). **WM:** Expression and travel grants, honoraria for MS expert advice and speaker's fees (Bayer-Schering, Biogen, Merck-Serono, Novartis, Sanoti, and Teva). **WM:** Expression and travel grants, honoraria for MS expert advice and speaker's fees (Bayer-Schering, Biogen, Merck-Serono, Novartis, Roche, Sanoti, and Teva). **MM:** Rottonic and travel grants, honoraria for MS expert advice and speaker's fees (Bayer-Schering, Biogen, Merck-Serono, Novartis, Roche, Sanoti, and Teva). **MM:** Rottonic and travel grants, honoraria for MS expert advice and speaker's fees (Bayer-Schering, Biogen, Merck-Serono, Novartis, Sanoti, and Teva). **MM:** Rottonic and travel grants, h

Funding provided by Sanofi

These data confirm the negative impact of MS on activities of daily living, and identify misconceptions about MS among patients in the US

Impact of Disease and Beliefs About MS

- Since diagnosis, many patients experienced an increase in the burden of MS, including worsening energy level, physical functioning, ability to exercise, and ability to fulfill professional goals (Figure 5)
- · 40.2% reported an increasing impact of MS on daily activities over the prior 24 months
- 86.4% of patients believed that disease progression was more likely if treatment was not started early, in spite of fewer than half starting treatment immediately after diagnosis (Figure 6)
 Approximately app heli michicoly believed that relapse would pet hele to the transmission of the started terms when the transmission of the started terms when terms wh
- Approximately one half mistakenly believed that relapses would not lead to irreversible damage

Figure 5. Physical, Social, and Emotional Burden of MS

| Changed for the worse Did not chan since diagnosis | nge | Changed for | or the better | since diagnosis |
|--|-------------|-------------|---------------|-----------------------|
| Level of energy | | | 74.0 | 21.7 4.3 |
| Physical functioning | | | 58.8 3 | 35.7 <mark>5.5</mark> |
| Ability to exercise | - | 52.7 | 36.4 | 10.9 |
| Outlook | - | 45.6 | 38.7 | 15.7 |
| Ability to fulfill professional goals | - | 48.4 | 42.0 | 9.6 |
| Emotional well-being | - | 42.5 | 47.1 | 10.4 |
| Ability to process information | - | 42.3 | 51.4 | 6.3 |
| Time for social activities | - | 39.5 | 48.9 | 11.6 |
| Financial well-being | - | 38.7 | 48.3 | 13.1 |
| Ability to cope with stress | - | 37.7 | 40.0 | 22.3 |
| Self-esteem | 32 | 2.7 | 49.8 | 17.5 |
| Roles in life with family, friends, work | 3 | 4.0 | 52.7 | 13.2 |
| Time for family activities | 26.4 | | 51.7 | 21.8 |
| Relationship with friends | 23.6 | | 58.0 | 18.3 |
| Abilty to have/take care of children | 22.5 | | 69.4 | 8.1 |
| Relationship with family | 15.5 | 59. | 8 | 24.6 |
| | | 10 | | |
| | 0 20 | 40 | 60 | 80 100 |
| | Patients, % | | | |

