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► **To cite this version:**

M Zeineddine, F Boumediene, A Al-Hajje, P Salameh, A Helme, et al.. Barriers to Access Multiple Sclerosis Disease-Modifying Therapies in Middle East and North Africa: A Regional Survey-Based Study. Seventh MENACTRIMS Congress, Nov 2022, LE CAIRE, Egypt. hal-04092761

HAL Id: hal-04092761

<https://unilim.hal.science/hal-04092761v1>

Submitted on 9 May 2023

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Barriers to Access Multiple Sclerosis Disease-Modifying Therapies in Middle East and North Africa: A Regional Survey-Based Study

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Background

- Multiple Sclerosis International Federation (MSIF) Atlas recorded an increase in the prevalence of multiple sclerosis (MS) in Middle-Eastern countries from 24 per 100,000 to 33 per 100,000 between 2013 and 2020.
- Moreover, epidemiological studies from the Middle East and North Africa (MENA) region showed a rising MS prevalence during the first two decades of the 21st Century.
- Despite shifting of the MENA region from low to moderately-high risk zone for MS, the management of the disease still varies markedly between different countries based on disease-modifying therapies (DMTs) availability, accessibility, and reimbursement.
- In general, introduction of novel DMTs in most MENA countries is usually delayed, as drug approval can take several months to years once approved for use by the Food and Drug Administration (FDA) or European Medicines Agency (EMA), depending on the country.

Objective

In order to gain better understanding of treatment accessibility and explore potential common areas of need in our MENA region, we carried an in-depth analysis of the Arab region Atlas of MS data, compiled by the MSIF, focusing on accessibility to originators and off-label DMTs in each country and identifying barriers to MS treatment.

Methods

- This is a descriptive, survey-based study whereby we extracted data collected between October 2019 and April 2020 for countries in the MENA region by the MSIF through their Atlas of MS online survey.

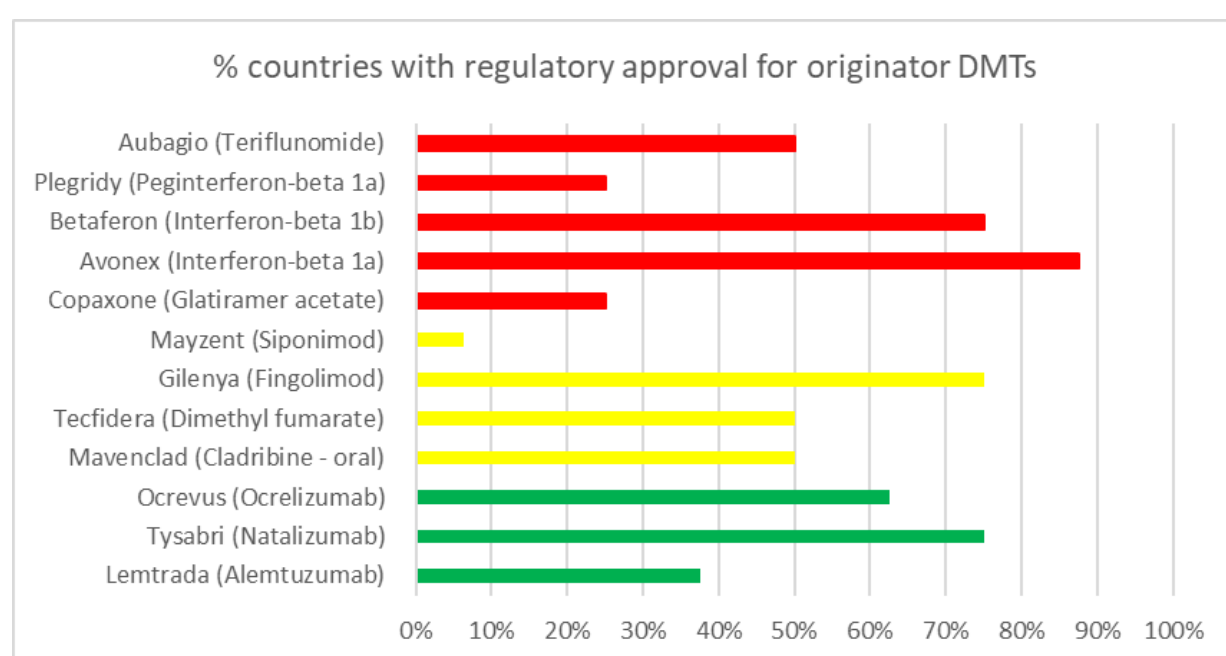
Results

- 16 out of 19 countries in the MENA region were included in this study: Algeria, Egypt, Iraq, Lebanon, Libya, Morocco, Palestine Sudan, Syria, Tunisia, Yemen, Kuwait, Oman, Qatar, Saudi Arabia and United Arab Emirates (UAE).

Regulatory Approval of DMTs in the MENA region

Figure 1. Percentage of MENA countries with regulatory approval for originator DMTs.

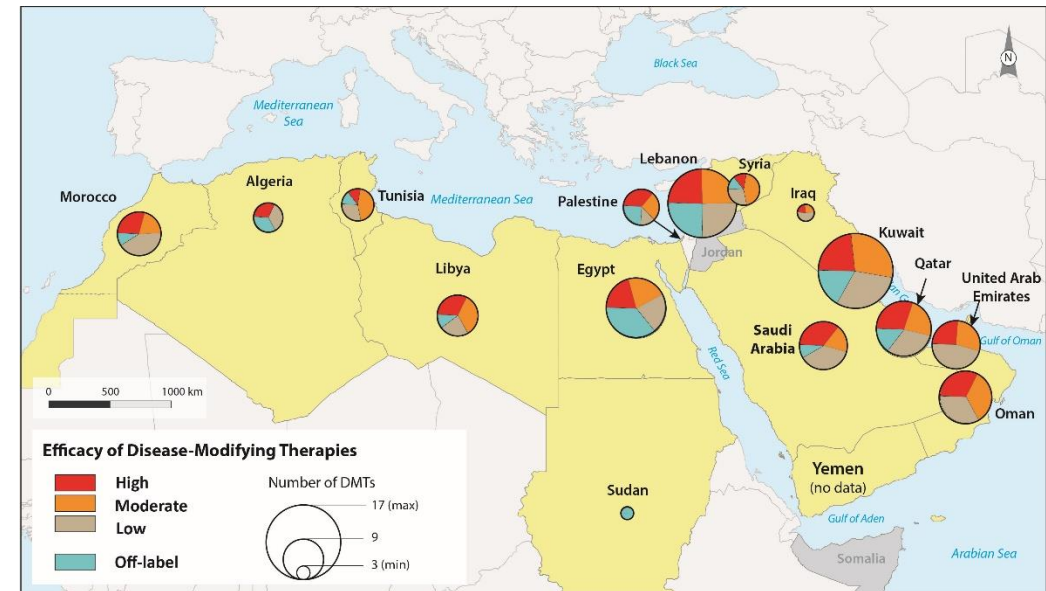
Green = High efficacy; Yellow = Moderate efficacy; Red = Low efficacy



Conclusion

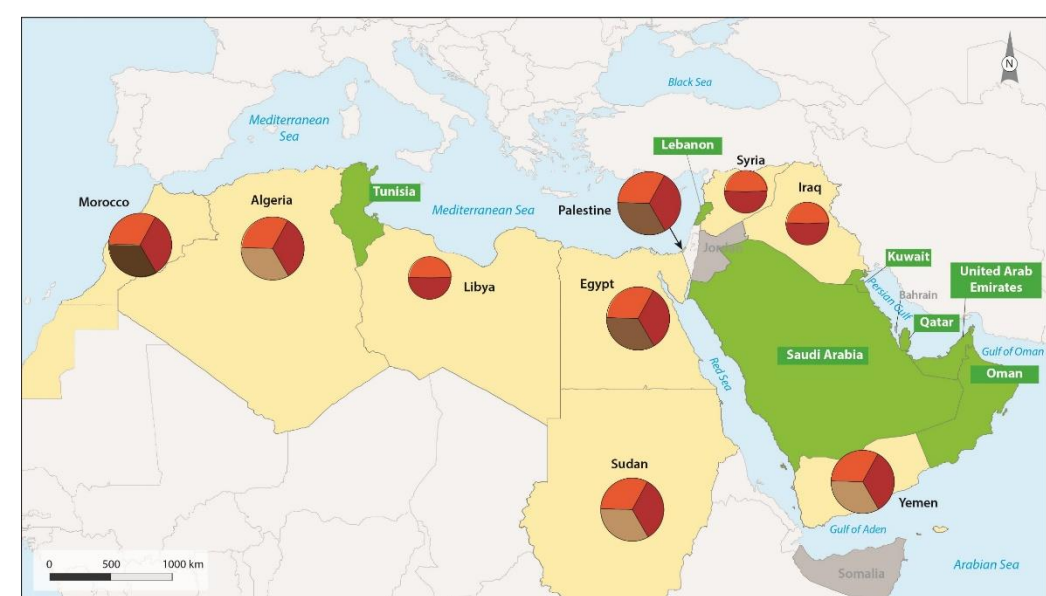
- Most MENA countries have access to DMTs, including high-efficacy DMTs.
- More than half of MENA countries report problems with treatment continuation with cost being the major barrier to treatment.
- The number of barriers to treatment correlates with the Gross National Income (GNI) per capita – richer countries have fewer barriers to treatment.
- This study highlights unequal access to treatment across the MENA region; therefore, there is an urgent need to improve access to DMTs in lower resource settings where there are barriers to improve health outcomes for patients with MS.

Use of On- and Off-Label DMTs in the MENA region



Countries	DMTs																						
	Alemtuzumab	Natalizumab	Ocrelizumab	Ribavirin	Cladribine (IV)	Cladribine (oral)	Dimethyl fumarate	Fingolimod	Siponimod	Glatiramer acetate	Interferon-beta 1a	Interferon-beta 1b	Peginterferon-beta 1a	Teriflunomide	Asatrigine	Cyclophosphamide	Fludarabine	Fumaderm	Leflunomide	Methotrexate	Minocycline	Mitomycin	
Algeria																							
Egypt																							
Iraq																							
Lebanon																							
Libya																							
Morocco																							
Palestine																							
Sudan																							
Syria																							
Tunisia																							
Kuwait																							
Oman																							
Qatar																							
Saudi Arabia																							
United Arab Emirates																							

Continuous Access to DMTs after Treatment Initiation



Barriers to Treatment

