

# Apples and Oranges: Is it Multiple Sclerosis or Fibromyalgia? It's a fine balance

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PROUDLY  
SUPPORTING  
PEOPLE WITH ALL  
NEUROLOGICAL  
CONDITIONS

## Introduction

As a community access nurse with MSWA I have observed a number of persons whom have been diagnosed with Multiple Sclerosis (MS) and Fibromyalgia (FM), with the two conditions displaying overlapping symptoms. My observations mirrored those of my colleagues. This made me question whether this was a localised phenomenon or if it was echoed throughout the MS community. FM shares numerous features with MS which include aetiology secondary to both genetic and environmental components, predominance among women, associations with depression and anxiety, and adverse effects on QoL (Marrie et al, 2012).

## Method

A literature search was conducted to identify the prevalence and incidence of FM in persons with MS and the implications for patient care.

## Results

Data on the epidemiology of FM among persons with MS are limited. Among 882 respondents from The North American Research Committee on Multiple Sclerosis (NARCOMS) Registry, a self-report registry for persons with MS, nearly 5% reported a diagnosis of FM (Marrie et al, 2008).

One study demonstrated that the age-adjusted prevalence of FM in the general population was 3.04% and in MS it was 6.82%.

The study found that the incidence of FM was 44% higher in the MS than the general population. With the incidence of FM was 2-fold higher in women than men in both population groups. Amongst those included in the study mean age of FM onset of 53.1 years in persons with MS, which comparable that of the general population, 52.6 years (Marrie, Yu, Leung, et al. 2012).

An observational study into chronic pain in MS undertaken by Clemenzi et al, 2014 found that 17.3% or 1/5th of the patients in their sample (a total of 205) were diagnosed with FM as a comorbidity, the authors concurred with the findings of other studies, that this frequency is much greater than that reported in the general population.

FM was the only comorbidity analysed in MS that was proven to wield a moderate impact on physical HRQoL (Marrie, et al 2012 as cited by Clemenzi, et al, 2014) Marrie, et al 2012 went on to cite that MS patients with FM should be considered to be at particular risk for poor mental HRQoL.

## Conclusion

Whilst the number of global studies undertaken with a view to FM as a comorbidity of MS is small, they do concur with our localised findings.

With a view to implications for care for the person with MS and a comorbidity of FM the following needs to be taken into consideration.

Whilst little correlation exists regarding the prevalence and incidence of FM & MS and the resulting implications for patient care there is significant evidence of many of the shared characteristics by the two conditions when applied solely to MS.

Clinical trials of disease-modifying therapies (DMT) and symptomatic therapies both pharmacological and nonpharmacological in MS typically exclude individuals with comorbidity, thereby restricting our knowledge of the safety and efficacy of therapy in this subset of patients (Marrie, 2017)

Safety, tolerability and effectiveness of MS treatment can be impacted by comorbidity. As such rehabilitation treatment goals probably need to be more conservative that is to say less aggressive for those with MS and comorbidities (Marrie, 2017).

Observational studies indicate that comorbidity affects treatment decisions. A study of administrative data for 10,698 patients with MS found that as the number of comorbidities increased, the prospect of initiating a DMT diminished (Marrie, 2017)

The effects of comorbidities in MS are broad, such as increased diagnostic delays, accelerated disability progression, increased changes visible on MRI, increased mortality and reduced quality of life. (Berrigin et al, 2016, Browne et al, 2014, Chruzander et al, 2013, Finlayson, Preissner and Cho, 2013, Marrie et al, 2009, Marrie et al, 2015 as cited by Marrie, 2017)

Persons with MS who have comorbidities have almost 3-fold increased risk of hospitalization (Comorbidities in Multiple Sclerosis: A Clinical Resource Guide, 2018)

Comorbid conditions in MS have a significant impact on disease course, quality of life, and on utilisation of healthcare. FM has serious repercussions on family, social and professional life. Furthermore when associated with potentially highly disabling disease such as MS, it can have a profound impact on the patients already compromised quality of life (Clemenzi et al, 2014).

Where comorbidities share overlapping symptoms with MS such as in as FM, it is imperative that the clinician is able to recognise, effectively treat and manage the comorbid condition. With appropriate management, the effect of the comorbidity on the person and on MS can be mitigated. Moreover further investigation is warranted; especially given the potential cumulative effects of these conditions (Marrie, 2017).



Fatigue	Depression
Numbness or Tingling	Tremor
Weakness	Headache/Migraines
Dizziness & Vertigo	Swallowing difficulties
Pain	Itching
Emotional Changes	Sexual Dysfunction
Gait Difficulties	Speech Difficulties
Spasticity	Breathing Difficulties
Vision Problems	Seizures
Bladder Problems	Sleep Disturbance
Bowel Problems	Thermodysrregulation
Cognitive Changes	Hearing Loss
Burning	



Fatigue	Depression
Numbness & Tingling	Tinnitus
Muscle Weakness	Headache/Migraines
Dizziness	Cognitive Impairment
Vertigo	Itching
Pain	Burning
Anxiety	Restless Leg Syndrome
Impaired Coordination	Dry eyes & Mouth
Muscular aching, throbbing & twitching	Skin Sensitivities & Rashes
Vision Problems	Sleep Disturbance
Bladder Problems	Thermodysrregulation
Irritable Bowel Syndrome	

## References

Clemenzi, A. Pompa, A. Casillo, P. Pace, L. Troisi, E. Catani, S. Grazia Grasso, M. (2014). Chronic pain in multiple sclerosis: Is there also fibromyalgia? An observational study. Medical Science Monitor, (20), 758-66. doi: 10.12659/MSM.890009

Comorbidities in Multiple Sclerosis: A Clinical Resource Guide, (2018)  
Retrieved from [https://mscomorbidities.com/wpcontent/uploads/Comobidities\\_Resource\\_Guide.pdf](https://mscomorbidities.com/wpcontent/uploads/Comobidities_Resource_Guide.pdf)

Marrie, R. Horwita, R. Cutter, G. Tyrr, T. Campagnolo, D. Vollmer, T. (2008). Comorbidity, socioeconomic status and multiple sclerosis. Multiple Sclerosis Journal, (14)(8), 1091-8. doi:10.1177/1352458508092263

Marrie, RA. (2017). Comorbidity in multiple sclerosis: implications for patient care. Nature Reviews Neurology, (13)(6), 375-82. doi: 10.1038/nrneuro.2017.33

Marrie, RA, Yu, BN, Leung, S. Elliott, L. Warren, S. Wolfson, C. Tremlett, H. Blanchard, J. Fisk, JD. (2012). The incidence and prevalence of fibromyalgia are higher in multiple sclerosis than the general population: A population-based study. Multiple Sclerosis and Related Disorders, (1)(4), 162-7  
doi: 10.1016/j.msard.2012.06.001