

Online Patient Ratings of a Neuromuscular Outpatient Practice: A Retrospective Study

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Abstract

Objectives: Online physician ratings increasingly influence patient choice, yet their trustworthiness and generalizability remain uncertain, particularly in complex specialties such as neuromuscular medicine. Only 5% of patients post reviews, but nearly 40% use online feedback to select physicians.

Methods: We retrospectively analyzed 218 reviews with star ratings posted between May 2016 and June 2025 for a single outpatient neuromuscular practice. Identifiable reviewers were matched to practice records to append referral, diagnostic, and demographic data. Quantitative and thematic analyses were performed.

Results: Among 218 reviews, 182 (83.5%) were positive and 36 (16.5%) negative. Negative themes included feeling dismissed, perceived rudeness, and rushed visits, while positive reviews emphasized thoroughness and effective care. Identifiable negative reviewers were predominantly White female patients (mean age 41) who commonly reported overlapping symptoms including pain, fatigue, motor difficulties, and sensory disturbances. Anxiety or depression was reported in 44.4% of identifiable reviewers.

Conclusions: Online reviews primarily reflect patient experience rather than clinical quality of care or physician competence. Structural pressures—time constraints, diagnostic expectations, and tertiary-care complexity—likely shape negative feedback and should be considered when interpreting online ratings.

Key words: Online physician reviews; patient satisfaction; patient experience; health care quality

Introduction

The growing digital ecosystem has transformed the way patients evaluate and select their physicians. Online platforms have become a primary source of information, and words posted on the internet can have a significant influence across all industries, including health care. Patients are increasingly prioritizing online reviews over referrals and personal recommendations.¹ These reviews are often utilized in medicolegal settings, including legal depositions, to build cases against physicians.² Neurology is a branch of medicine

that is particularly vulnerable to perception of negligence due to the challenging nature of diagnosing and managing long-term, complex diseases. Physicians in this field are often presented with patients experiencing non-specific, prolonged symptoms that often complicate diagnostic certainty and shape patient expectations. Approximately 22% of neurologists have been sued at least once during their careers.³ As digital platforms continue to evolve and influence user opinions, especially in healthcare, it is important to study and understand how these changes affect the medical field and how online reviews correlate with physicians' reputations, qualifications, and quality of care, particularly in complex clinical specialties.

Studies show that online physician rating platforms are rapidly growing, with approximately one in six physicians having an online rating.⁴ Prior research has demonstrated that patients with positive experiences comprise the "silent majority," while a small number of negative reviews can skew perceptions and influence potential patients.¹ In fact, 40% of patients have switched providers due to negative online reviews, but it is estimated that only 5% of patients take the time to write provider reviews themselves.^{1,5} Some medical fields, like neurology, are defined as "high-risk specialties" in regard to garnering negative online reviews, because they manage complex conditions that are less likely to have curative solutions and frequently consult on patients who have not found relief from multiple providers.

Recent research suggests that negative online reviews do not correlate with formal measures of patient satisfaction.⁶ Instead, most negative reviews from non-surgical patients focus on non-clinical aspects of care, including communication, office staff, and wait times.⁷

Limited research has examined how gender or other demographic factors influence online physician reviews. Available data indicates that females write 60% more reviews than males, and males are more likely to leave negative reviews.⁸ Studies also indicate that female patients are more likely to report disrespect from male physicians—but not from female physicians—and that women more frequently comment on soft skills.⁸ However, most gender-based studies rely on qualitative analysis, making it challenging to determine whether reviews accurately reflect real experiences or are influenced by gender-based bias.⁸

Online physician ratings in neurology-related specialties appear to be largely driven by patient perception of physician competence, bedside manner, and office-related factors, with negative comments disproportionately influencing overall scores.⁹ Despite this, these platforms are increasingly used by patients when forming impressions of physicians, highlighting their growing influence in clinical decision-making, and in turn, underscoring the importance of understanding factors that shape patient perception. The objective of this retrospective, non-interventional quality improvement project was to evaluate the implications of negative online

reviews on an outpatient neuromuscular medical practice and to assess the credibility, themes, and potential biases present within these comments.

Materials and Methods

This retrospective, non-interventional study analyzed online patient feedback posted between May 2016 and June 2025 from an outpatient neuromuscular practice. This neuromuscular practice is a tertiary care center, primarily accepting referrals from other neurologists to confirm or assist with complex patient diagnoses. The neuromuscular conditions diagnosed and treated at this practice include, but are not limited to, neuropathies, myopathies, chronic inflammatory demyelinating polyneuropathy (CIDP), myasthenia gravis (MG), and amyotrophic lateral sclerosis (ALS). The practice studied is independent and employs one neuromuscular specialist and ten health care and clinical research professionals.

A total of 221 reviews were collected from seven platforms: Google Reviews, Vitals, Rated, Healthgrades, Birdeye, WebMD, and Yelp. Reviews without star ratings ($n=3$) were excluded to allow for quantitative and qualitative analysis, leaving 218 reviews for analysis. Reviews were included if they were publicly posted on one of the identified platforms, pertained to the neurologist or the practice, and contained a numerical star rating.

Reviews were classified using the standard 5-star rating system, where negative reviews consisted of 3 stars or fewer, and ratings of 4-5 stars were defined as positive. A total of 36 negative reviews (16.5%) and 182 positive reviews (83.5%) were identified. Among the 36 negative reviews, 18 lacked sufficient identifying information and were excluded from demographic analysis (e.g., age, gender, and symptoms) but were retained for thematic analysis.

The star rating served as the primary quantitative measure, condensing healthcare experiences into a numerical value. Qualitatively, written comments were analyzed for patterns related to soft skill categories (communication, bedside manner), practice-related factors (wait times, office management), and reviewer profiles (gender, age, and presenting symptoms when identifiable).

Quantitative data analysis was collected and organized using Microsoft Excel. Figures were generated using Microsoft Word's chart creation and editing features. Qualitative analysis involved manually reviewing comments for recurring themes to overall patient experience. The primary outcome was characterization of thematic and demographic patterns in online reviews, particularly negative, of a neuromuscular practice. Language editing assistance was used during manuscript preparation; all content, analysis, and interpretation were reviewed and verified by the authors.

This study involved analysis of publicly accessible online information and was conducted in accordance with institutional quality improvement (QI) guidelines. A limited retrospective review of clinical records was performed solely to confirm identity matching and to validate the clinical context of the publicly available reviews. Only de-identifiable and summary-level information was recorded for analysis, and no protected health information was included in the study dataset. No direct patient contact occurred. Since this project was determined to be a quality improvement analysis using publicly available data with limited clinical record validation, formal IRB review was not required under institutional policy.

This project aimed to evaluate demographic and thematic patterns of reported patient experiences in online reviews of a tertiary neuromuscular clinic. Understanding these patterns may help identify areas of miscommunication between patients and providers and highlight the limitations of heavily relying on online reviews when forming impressions of care, especially in specialized neuromuscular clinics.

Results

Of the 218 reviews analyzed, 196 (89.9%) originated from Google Reviews, with the remaining reviews distributed across the six additional platforms. Overall, 182 reviews (83.5%) were positive, and 36 reviews (16.5%) were negative.

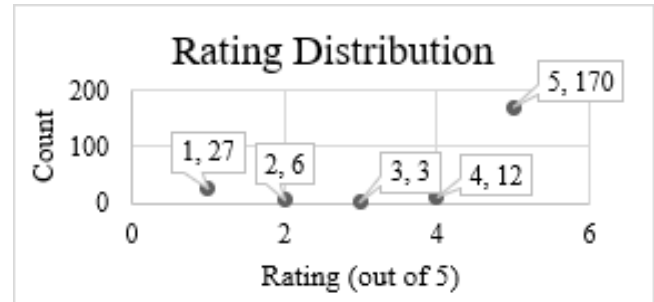


Figure 1. Distribution of online review ratings (N=218). Ratings are heavily skewed toward positive scores, with a clear peak at 5 stars.

From a qualitative perspective, the most common negative themes included perceived lack of empathy, rudeness, and rushed encounters (Figure 2). These findings contrast with positive reviews, which frequently emphasized the physician's thoroughness and effective care (Figure 3). Less frequent complaints involved procedural discomfort, concerns about misdiagnosis, and operational issues such as follow-up or billing. Some negative feedback also reflected frustration with outcomes or system-level factors beyond the physician's control, including parking expenses and travel times.

Figure 2. Negative review tags by frequency (n = 34). Negative reviews were thematically coded, with multiple tags allowed per review. The most frequent themes were perceived lack of empathy or dismissive behavior (21, 61.8%) and poor communication (18, 52.9%). Other reported concerns included inadequate clinical evaluation, diagnostic and treatment concerns, and office or staff professionalism. Less frequently cited issues included billing, privacy, ethical concerns, and access burden.

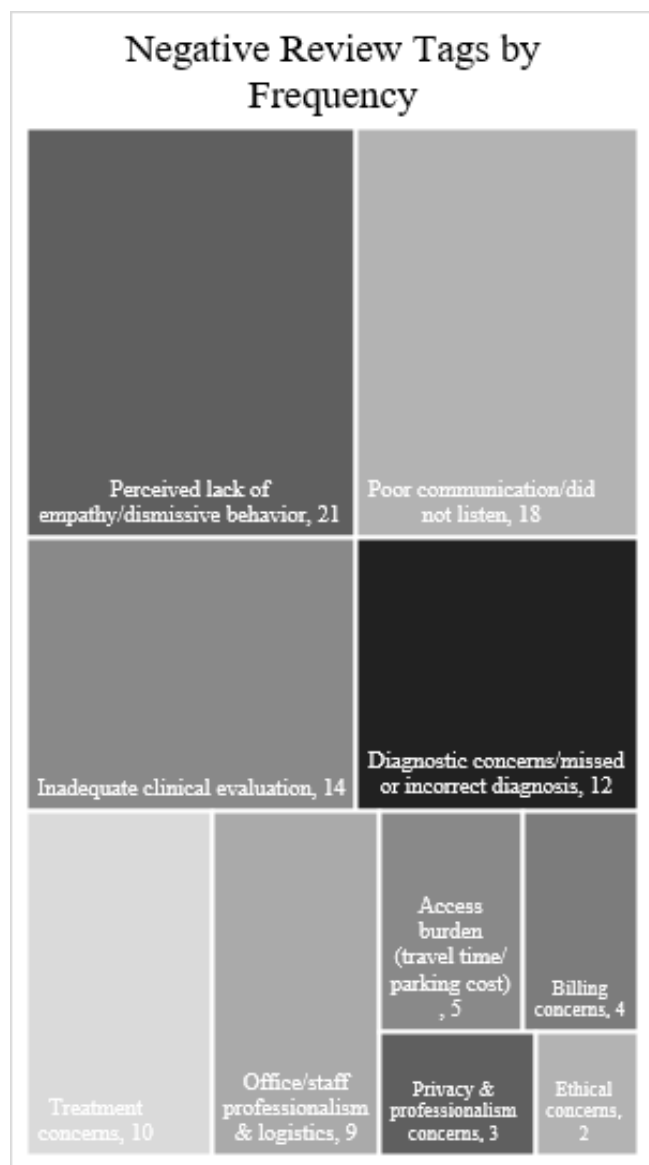
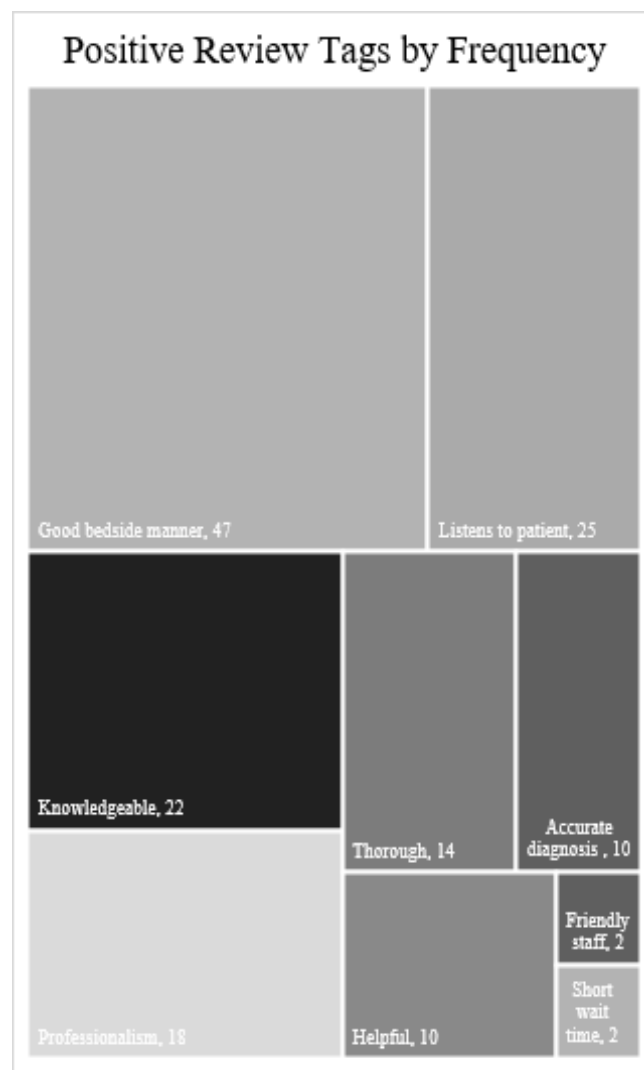


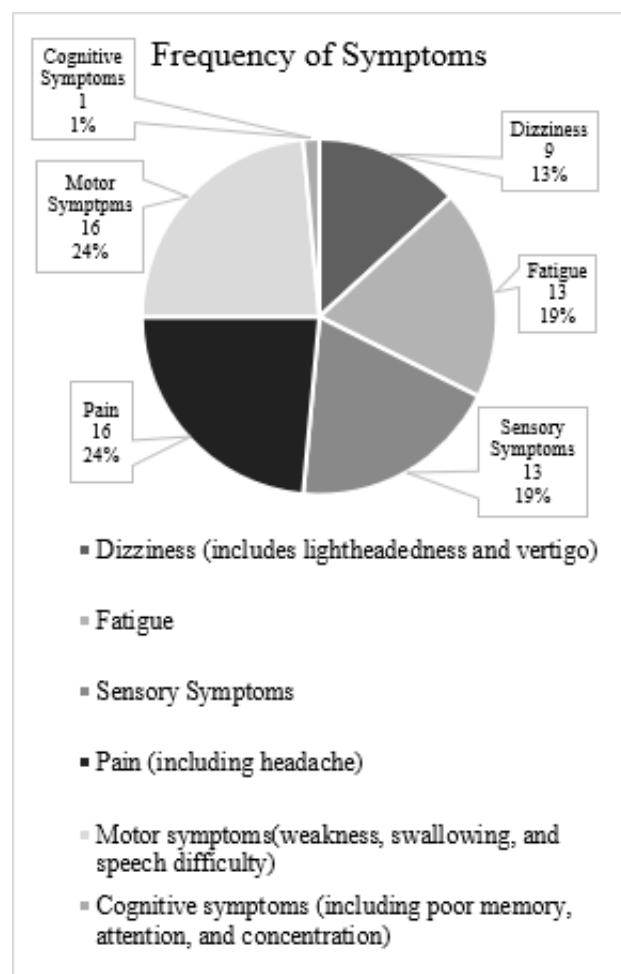
Figure 3. Frequency of positive review themes in online reviews (n = 150). The most frequently cited theme was good bedside manner (n=47), followed by listening to patients, knowledge, and professionalism. Less frequently mentioned themes included friendly staff and short wait time.



While these themes were common within negative reviews, they represented a minority of the overall feedback, which was predominantly positive. Several negative comments appeared inconsistent with the physician's clinical documentation. These discrepancies suggest that a subset of negative reviews may reflect a lack of satisfaction with communication or other non-clinical aspects of care rather than clinical decision-making.

When examining reported symptoms, most individuals mentioned pain, fatigue, motor difficulties, and sensory disturbances—symptoms that are often subjective and multifactorial (Figure 4). These symptoms were collected from a pre-visit patient questionnaire completed prior to physician evaluation. Among the identifiable reviewers, 13 of 18 reported both fatigue and pain, and 12 of 18 reported both motor and sensory symptoms. Some patients also reported co-occurring symptoms of anxiety or depression (44.4%).

Figure 4. Distribution of symptoms among identifiable reviewers (n = 18). Pain and motor symptoms were most frequently reported (16/18, 88.9%), followed by fatigue and sensory symptoms (13/18, 77.2% each). Dizziness was reported by 9/18 (50%), and cognitive concerns were rare and therefore underestimated (1/18, 5.6%).



The demographic data of negative reviews showed a gender skew toward female reviewers (12/18). Among female reviewers, six were under 40 and six were over 40, whereas all identifiable male reviewers (6/18) were over 40 (Figures 5 and 6). The majority of reviews were posted by White patients (74%) (Figure 7).

Figure 5. Gender distribution of identifiable reviewers (n = 18). Most reviewers were female (12/18, 67%), while males comprised 33% (6/18).

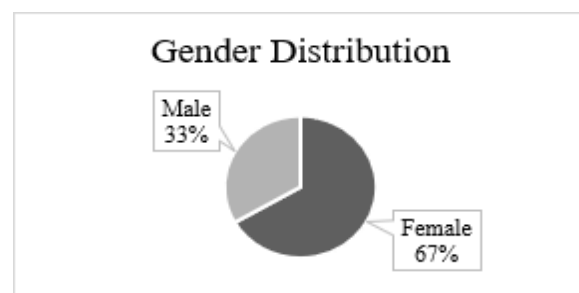


Figure 6. Average age of identifiable reviewers by gender (n = 18). Female reviewers had a mean age of 41 years (6/12 under 40), while male reviewers had a mean age of 66.2 years (6/6 over 40).

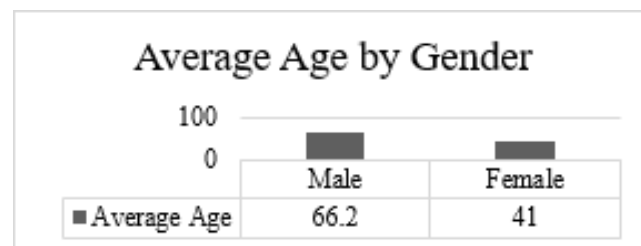
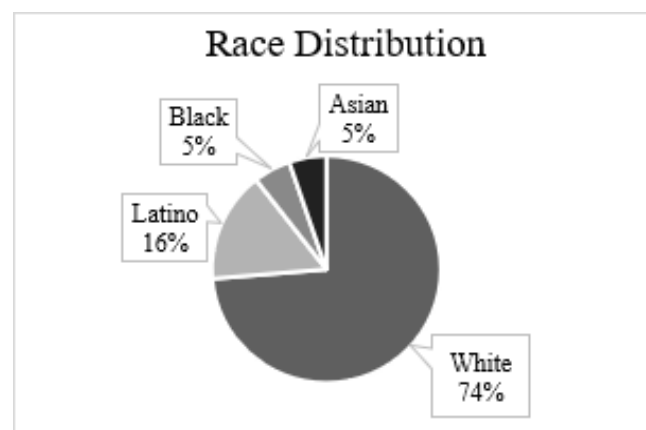


Figure 7. Racial distribution of identifiable reviewers (n = 18). Most reviewers were White (14/18, 74%); remaining reviewers belonged to other racial groups. Racial data were available for 18 of 36 negative reviews.



Among the 36 negative reviews, 18 (50%) lacked sufficient identifiable information to determine age, gender, race, or symptoms. In some cases, negative reviews were followed by contact from alleged IT companies soliciting payment to remove the comments. Among identifiable reviews, White female reviewers (mean age 41) accounted for a significant proportion of negative ratings. Reported symptoms in this group commonly included fatigue, dizziness, and pain.

Discussion

Our observations support prior studies' conclusion that online physician ratings do not accurately reflect a physician's competence or the quality of care provided. The skewed distribution of ratings, the non-representative demographic sample, and the subjective nature of many comments question the reliability of online reviews as an objective indicator of physician performance. Online review systems have proven to be unreliable.¹⁰ Often, comments are biased and not based on real experiences but rather written with the intention of harming or promoting an establishment.¹⁰

Many negative reviews focused more on office interactions and perceived bedside manners than on clinical decision-making or treatment outcomes. These findings are especially relevant in neuromuscular medicine, where clinicians manage more diagnostically complex cases than many other specialties.¹¹ Neuromuscular diseases are rare and often difficult to evaluate because of the overlapping and variable symptoms that mimic other diseases.¹² The rarity of most neuromuscular diseases (90%) limits the exposure and familiarity in many primary care settings, leading to prolonged diagnosis.¹³ Patients are referred to a tertiary neuromuscular clinic for highly specialized care not typically available in general medical settings, often after seeing multiple providers and experiencing chronic, progressive symptoms and prior unsuccessful diagnoses or treatments.

Patients' elevated expectations from being referred to a tertiary center with specialized expertise may have contributed to their perception that care was "below expected," particularly when patients are seeking diagnostic confirmation or symptom relief after prolonged uncertainty. This is consistent with our findings that many negative reviews reflect dissatisfaction with diagnoses or outcomes, even when appropriate diagnostic procedures and treatment protocols were followed. Patients are often frustrated when informed that no clear neurological explanation can be identified for their symptoms, even though this may be the correct conclusion based on available evidence. Increased access to online health information has contributed to greater self-directed symptom interpretation and self-diagnosis, which may influence patient expectations and contribute to heightened sensitivity.¹⁴ Prior research has shown that complaints from patients with functional neurological disorders often stem from disagreement with the diagnosis, making the concerns difficult to resolve.¹⁵

In some cases, dissatisfaction arises when patients do not receive confirmation of a long-standing diagnosis that carries implications for disability benefits or ongoing costly therapies, particularly when insurance coverage was limited. For these individuals, their life was centered around a specific diagnosis for years and revising that diagnosis could be inconvenient or uncomfortable.

At a population level, disability benefit data highlight the burden of chronic and complex conditions commonly managed within neurology and related subspecialties. In the United States in 2024, the most common impairment among disabled-worker awards was diseases of the musculoskeletal system and connective tissue (35.3%), followed by mental disorders (13.5%), and diseases of the nervous system and sense organs (9.6%).¹⁶ The categories encompass a range of conditions that are frequently encountered in neurology and neuromuscular practices.

These conditions are associated with an intertwined psychological and financial burden. Patients with neuromuscular diseases experience not only motor and functional impairments but also substantial psychological distress. Recent evidence indicates that anxiety and depressive symptoms are highly prevalent in this population, molded by factors such as onset age, perceived social support, and disease severity, and are associated with reduced quality of life.¹⁷ These conditions may also amplify symptom perception, with depression and anxiety contributing to fatigue, sleep disturbances, and appetite changes, which commonly overlap with chronic neurological disease.¹⁸ Prior research has shown that patients with chronic diseases and higher levels of psychological distress are more likely to report lower satisfaction and poorer evaluations of healthcare services.¹⁹ Notably, just under half of the patients (44.4%) in this study reported anxiety or depression, factors that might increase symptom sensitivity and contribute to reduced satisfaction with diagnostic uncertainty. These conditions were self-reported in the patient intake form rather than assessed using a validated instrument.

Beyond psychological impact, neuromuscular diseases also have significant financial and functional impacts. Recent work has identified four interconnected categories of these burdens: informational challenges, administrative and advocacy demands, employment-related opportunity costs, and reduced independence related to out-of-pocket spending on equipment and home modifications.²⁰ These factors reveal the considerable pressures experienced by patients and families with neuromuscular diseases, further complicating the clinical context for physicians to provide care and potentially influencing how patient experiences are reflected in online reviews.

This complexity is also reflected in patient-physician communication, where patients may struggle to accurately describe their symptoms, further complicating the diagnostic process. It is common for individuals to use non-specific or

incorrect medical terminology when describing symptoms, for example, reporting “fatigue” when in fact they are experiencing weakness or numbness. These terms have distinct clinical meanings, and such confusion can lead to miscommunication between patients and physicians, potentially affecting patient satisfaction. This is especially relevant in neurology, where symptoms frequently overlap across multiple disorders, complicating diagnostic interpretation.

A further challenge in clinical assessment is that many commonly reported symptoms are subjective in nature. Chronic pain is one of the most common conditions in outpatient medical settings.¹⁸ It cannot be objectively assessed because of its diverse origins and the lack of a single marker for all mechanisms underlying the sensation.¹⁸ As a result, symptom reporting may vary between individuals and may be influenced by contextual factors such as work avoidance, insurance limitations, and other external factors.

The variability and overlap of symptoms were observed in this study, with 13 of 18 patients experiencing both fatigue and pain, and 6 of them also reporting anxiety and/or depression. Research has documented that both pain and fatigue are common and frequently overlapping symptoms.²¹ Similarly, 12 of 18 patients reported both motor and sensory symptoms, reinforcing the multifactorial and overlapping nature of symptoms in neuromuscular disease.

Additionally, patients discuss details that physicians may consider less clinically relevant and attempts to redirect the conversation toward a focused history can often be perceived as “rude” or dismissive.

Negative online reviews may reflect these communication barriers and differences in expectations between physicians and (often) patients without formal medical training, particularly in complex neuromuscular evaluations where symptoms overlap, and diagnostic reasoning requires clinically relevant information.

It is important to recognize that physicians aim to deliver objective, evidence-based assessments and guide patients toward effective symptom management and disease treatment. Physicians undergo extensive training over many years, whereas many patients have limited familiarity with the complex reasoning and processes involved in diagnosis and treatment decision-making, especially in neuromuscular medicine, where atypical presentations are common. This difference in perspective can contribute to patient dissatisfaction, particularly when online reviews emphasize perceived delays, miscommunication, or unexpected diagnostic conclusions. This observation reflects an increasing discrepancy between physician and patient perception in complex specialty care. We suggest larger opinion surveys to better understand the generalizability of this problem and the importance of this issue in determining the future role of the physician in an evolving healthcare system.

This pattern suggests that patient ratings may reflect limited understanding of the time constraints and financial models that govern clinical services, where compensation is tied to time spent. As a result, physicians may be evaluated in ways influenced by systemic limitations beyond their control, rather than clinical performance.

This study combines quantitative and qualitative analyses across a dataset of online reviews, allowing for a comprehensive assessment of trends, patient perceptions, and potential discrepancies between reported experiences and documented care in a tertiary medical setting.

Despite these insights, this study has several limitations, including a relatively small sample size, as only 18 of the 36 negative reviews could be linked to identifiable patient records, as reflected in figures 4-7. This study focuses on a single physician in an urban location who treats complex referrals and relies on reviews collected primarily through search engines. Two reviews included only star ratings without written comments, limiting the depth of qualitative analysis. Reviews are inherently subjective, with self-selection bias favoring those with particularly strong feelings. Some demographic data was also missing, limiting interpretation across age and racial groups. Cross-checking reviews against medical documentation helped mitigate some of these limitations, although generalizability remains a concern. Future research should include larger datasets from multiple physicians across both urban and rural settings to better capture the experiences of diverse patient populations and healthcare environments.

Understanding the impact of negative reviews on patient perception, as shown in this study, may help contextualize how online physician ratings are interpreted, particularly in specialized fields like neuromuscular medicine, and may inform future efforts to develop more objective methods of assessing patient experience. More importantly, these findings showcase the challenges physicians face in balancing the time and attention devoted to online feedback with the demands of providing high-quality care.

The implications of online patient reviews of physicians remain a relatively new area of study. This project contributes to the growing body of research examining the content, credibility, and utility of online feedback. In complex neuromuscular care, online physician ratings reflect a mixture of symptom burden, diagnostic uncertainty, communication challenges, and heightened expectations and therefore may not reliably represent clinical competence or quality of care. As digital platforms continue to shape patient perceptions, future research should examine larger, more diverse datasets and explore strategies to improve the accuracy and clinical usefulness of online physician ratings.

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