Original Research Article

Identification of clinician challenges in order to drive the development of competency-based education: results from an international needs assessment in multiple sclerosis

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Abstract

Objective. To highlight clinical gaps of neurologists and nurses regarding their skills and confidence in engaging and communicating with multiple sclerosis (MS) patients to inform the design of continuing medical education (CME) initiatives.

Methods. This international IRB-approved study deployed in six countries (France, Germany, Italy, Spain, UK and USA), utilising a mixed-methods approach (qualitative interviews and an online survey) to explore the self-reported challenges of neurologists and nurses across the spectrum of MS care. Results. The sample included actively practising neurologists (n=148) and nurses (n=146), 42% of whom had an annual caseload of 150+ MS patients. The participants reported challenges in assessing patients’ adherence to treatment, engaging patients in shared decision-making and communicating confidently with patients and caregivers. Participants reported their own skill and confidence deficits as potential causalities for these challenges. Conclusion. Results suggest that neurologists and nurses would be receptive to education to develop their skills with regard to communication with patients and caregivers. CME and performance improvement initiatives should address the clinical challenges identified in this study to optimise clinicians’ effectiveness and patient outcomes. Patient–provider communication skills represent a priority area for the development of CME and performance improvement initiatives.

Keywords: Patient–provider clinical relationship, multiple sclerosis, continuing medical education, mixed methods, needs assessment

Introduction

Multiple sclerosis (MS) is a debilitating, inflammatory disease of the central nervous system. The precise aetiology of MS remains unclear and there is no known cure for the disease. MS treatment involves delaying progression through the use of disease-modifying therapies (DMTs) and symptom management¹ with the goal of maintaining patient quality of life (QoL). Patients need to consistently and accurately adhere to their treatment plan for the long term, in order to maximise the benefits of their DMT.² Devonshire et al. said that adherent patients report better QoL and fewer neurological issues.³ However, Wong et al. reported that 50% of MS patients discontinue treatment with DMT within 2 years of initiation.⁴ Given this high-reported patient “drop-out” and the importance of adherence to treatment, it behoves neurologists and nurses, due to their active
role in MS treatment management and patient education, to understand what contributes to adherence in order to design supportive interventions. Of particular importance is to understand practising clinicians’ challenges with respect to their role in impacting adherence.

The Institute of Medicine emphasises that, “consistent and effective communication between the patient and the clinician has been associated in studies not only with improved patient satisfaction and safety, but with better health outcomes, and often lower costs.” Effective communication between healthcare providers and their patients has been directly linked to a variety of improved patient outcomes, including greater satisfaction with care received, better functional status and increased adherence to self-care plans. Patients report that the quality and nature of communications by their providers are of the utmost importance; however, many clinicians unknowingly fall short in these areas. It is almost a banality to say that constraints of practising medicine in the 21st century are due to lack of time and short office visits. However, clinicians are often unaware that their communication style and skills can impact patient behaviours, adherence and outcomes, and may need to improve this aspect of their practice to make the most of their counselling time with patients.

To support the development of continuing medical education (CME) initiatives for practising healthcare providers, an exploratory, international study was conducted in six countries to identify clinical practice issues and challenges reported by experienced neurologists, nurses, radiologists and pharmacists, who specialise in treating and managing MS. This study also aimed at identifying specific gaps in knowledge, skills and confidence that could potentially contribute to the difficulties they encounter when communicating with their patients. This article will focus specifically on the findings drawn from neurologists and nurses regarding challenges in patient-provider communication because of their essential role in the patient-provider relationship, assessing patient adherence, engaging patients in shared decision-making and in effectively communicating with patients and their caregivers. Findings will provide evidence of healthcare provider learning needs, inform the design of educational and clinical practice tools, and promote self-reflection amongst MS clinicians regarding their own strengths and limitations in communicating with their patients. The findings presented focus specifically on the analyses comparing differences between countries, as the focus of this study was to design educational initiatives sensitive to the local context in the targeted countries.

**Methods**

In this study, a mixed-methods approach was utilised to explore and gain insights into the self-reported clinical practice gaps of neurologists and nurses, across six countries (Figure 1). The use of a mixed-methods framework allowed the researchers to leverage the depth of the qualitative exploratory data and the analytic power of quantitative data. The study protocol involved triangulation in order to gain several perspectives of the same problem and to ensure validity and trustworthiness of findings. In this case, triangulation of analytical approaches (qualitative and quantitative), data collection methods (interviews and survey) and data sources (neurologists, nurses, radiologists and pharmacists) was used.

**Inclusion/exclusion criteria**

The study population included neurologists and nurses, who treat and manage people with MS. To meet the inclusion criteria, participants had to be practising actively in one of the six countries of interest (Germany, Spain, France, United Kingdom, Italy and United States) and have a caseload of at least five MS patients per year. The minimum patient caseload was selected because the study targeted radiologists and pharmacists who may not see MS patients regularly. The caseload for neurologists and nurses was expected to be much higher. To ensure sample diversity, purposive (selective) sampling was utilised, based on the following key participant characteristics: region, years of practice experience and practice setting. This study targeted actively practising providers, who are more likely to be candidates for CME interventions and who may not have received competency-based training (including skills in communicating with patients) as part of their medical school curriculum. Participants with less than 5 years of clinical practice experience were screened out to ensure that recent graduates and providers...
in the early stages of their career were excluded from the study, as these participants would have likely been exposed to competency-based curriculum.

**Recruitment**

Participants for both the interviews and surveys were recruited from online panels obtained via an international provider database complying with ESOMAR code of conduct and ethical standards for market and social research. All participants provided informed consent prior to participation.

To ensure the protection and confidentiality of human subjects, anonymity of the data, acceptable levels of compensation (i.e. market fair but not enough to create coercion) and that the study followed international guidelines and policies, independent ethical approval was obtained in each target country through an international ethical review board.

**Interviews**

Semi-structured qualitative interviews were conducted to explore clinicians’ challenges related to different aspects of MS care, including self-reported challenges and contributing causes to the challenges as a function of knowledge, confidence or skills gaps in treatment and management approaches. Key Informant Interview guides included open-ended questions that were developed as informed by a literature review of current best practices in the treatment and management of patients with MS, as well as input from the faculty co-author (M. Sharief). Questions were adapted to the role of each professional (i.e. neurologist, nurse, radiologist or pharmacist) involved in treating and managing patients with MS. The semi-structured interview guides were designed to assess the clinicians’ challenges with regard to different aspects of the continuum of care, as well as self-reported clinical practice skills and behavioural challenges, and specifically orientated to elicit challenges in the patient–provider clinical dialogue. Each 45-minute telephone interview was conducted by a trained interviewer in the official language of the participant. After the completion of each interview, interviewers evaluated the quality of the discussions in relation to the study objectives. Interviews were selectively chosen for transcription based on the quality of the discussions, and to ensure diversity of perspectives.

**Surveys**

Findings from the literature review and faculty input (M. Sharief) were used to guide the design of a quantitative survey. The resulting survey was developed as a series of questions assessing gaps and underlying causes using multiple ordered-category responses. More specifically, participants responded to questions by indicating 1) the relevance of skill statement to clinical practice (not relevant, somewhat relevant and essential); 2) his/her current level of knowledge regarding a practice issue (not acceptable, could be improved and acceptable), 3) his/her current level of skill (needs significant improvement, needs minor improvement and optimal); 4) his/her current level of confidence (1 = low confidence and 5 = optimal; see Table 1). Similar to the interview guides, questions in the survey were tailored to each professional ensuring adaptation to each healthcare provider’s role. Surveys were approximately 20 minutes in duration and completed online in the official language of the participants’ country of practice.

**Analysis plan**

Qualitative data (from interviews) were systematically coded according to the core concepts selected from the literature review. An interviewers’ debriefing session was held to allow for in-depth discussion of the themes emerging from the qualitative interviews and further to refine the coding process. Coding and analysis of transcripts were performed using N-Vivo 7.0 software (QSR International, Cambridge, MA). The qualitative analysis approach draws from the principles of both thematic analysis and directed content analysis. The process involved four steps: 1) identification of codes through the literature review and

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**Table 1. Examples of questions and items used in each phase of the study.**

| Qualitative phase |  |
|-------------------|------------------|
| **Areas of investigation** | Example of question | Example of probe |
| Assessment and diagnosis | Related to area of investigation #4 | Why these challenges? |
| Treatment | What are the challenges associated with patient’s management of the treatments you recommend? | What role do you play in addressing these issues directly with patients? |
| Management | | |
| Patient–provider communication | | |

| Quantitative phase |  |
|-------------------|------------------|
| **Category** | Examples of questions | Examples of items |
| **Skill** | My CURRENT level of ability/skill (Needs Significant improvement, Needs Minor improvement, Optimal) | Assessing short- and long-term goals in the treatment plan |
| **Confidence** | Please indicate your current level of confidence discussing each of the topics (1 – Low to 5 – Optimal) | Assessing patients’ adherence to their treatment plan |
| **Relevance** | In my role, how RELEVANT is this ability/skill to provide optimal care to patients? (Not relevant, somewhat relevant, essential) | The impact of non-adherence to treatment plan or monitoring schedule |
| | | Patient preferences that are against my recommendations |
| | | Integrating short- and long-term goals in the treatment plan |
| | | Assessing patients’ adherence to their treatment plan |

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the interviewer’s debriefing; 2) coding of data according to these codes; 3) analysis of data that did not fit any of the predefined codes; and 4) identification of key themes emerging from the data.

The analysis of the quantitative data (from surveys) employed frequencies, cross-tabulations, analysis of variance and Tahmane’s T2 post hoc tests, using SPSS 12.0 software (SPSS, Chicago, IL). To generate trustworthy and reliable findings, qualitative and quantitative data were synthesised through multidisciplinary interpretation by educational and clinical subject matter experts.

Results

Results are presented based on the findings from neurologists and nurses because of their essential role in the patient–provider relationship, assessing patient adherence, engaging patients in shared decision-making and in effectively communicating with patients and their caregivers.

Sample size and demographics

The sample included 148 neurologists (interviews, n=16; survey, n=132) and 146 nurses (interviews, n=14; survey, n=132; Table 2). This sample represented a response rate ranging from 12% in France to 15% in Spain. Forty-two percent of participants had a caseload of more than 150 patients per year. Respondents had a broad range of years of practice ranging from 12% in France to 15% in Spain. Forty-two percent of neurologists had 10 years of practice, 31% had more than 10 years of practice, and almost half of respondents were from academic-based settings (49%). Less than one-third (29%) of nurses were authorised to prescribe treatment.

The following section presents the study findings related to neurologists’ and nurses’ gaps in clinical practice, and the source of the gap with respect to knowledge, skill and confidence in relation to 1) assessing patient adherence, 2) the shared decision-making process with patients and 3) communicating with patients and caregivers. Country differences in relation to each theme are presented for neurologists and nurses in Tables 3 and 4, respectively.

Challenges in assessing patient adherence

Addressing issues of patient adherence was a challenge reported by both neurologists and nurses. Neurologists (59%) reported that assessing patient adherence to their treatment plan was essential to their role. However, over half (63%) reported that their skill to assess patient adherence needs minor to significant improvement. Close to half of neurologists (46%) reported that their level of confidence in assessing patient adherence was low to moderate. Significant differences were seen in the relevance of this skill by country, with no differences for current level of skill or rating of confidence (Table 3).

A majority of nurses (73%) reported assessing patient adherence to their treatment plan as a skill “essential” to their role. Over half of nurses (60%) reported that their skill to assess patient adherence needs minor to significant improvement. Almost half of nurses (48%) reported that their confidence in their ability to assess adherence was low to moderate. Significant differences were seen by country for the current level of this skill and rating of confidence (Table 4).

Qualitative data revealed that patient adherence could be an issue due to the patient’s understanding of MS heterogeneity. When patients are not in a relapse or experiencing any symptoms, they may not fully understand the need to remain adherent to their treatment plan. The following quote exemplifies this challenge:

> It’s pretty challenging really. I think patients will all tell you that they’re not always adherent to therapy ... So it can be hard ... sometimes because they can’t see a difference if they don’t take or they do take the medication, so very often about helping them to understand that, to work out, that actually if I don’t take it actually I don’t feel any different, but it’s still important to take it. — Nurse, United Kingdom

Challenges in the shared decision-making process

Participants reported a substantive gap regarding their abilities to engage patients and/or caregivers in shared decision-making as a result of knowledge, skill and confidence deficits. Engaging patients in shared decision-making was reported as an “essential” skill for two-thirds of neurologists (66%). Almost half of neurologists (49%) reported that their skill to engage patients in shared
decision-making needs minor to significant improvement. Over one-third (35%) of neurologists reported that their confidence in their skill to engage patients in shared decision-making was low to moderate. Significant differences were seen for neurologists by country for relevance and current level of skill (Table 3).

Engaging patients in shared decision-making was also reported as essential by a majority of nurses (64%). Furthermore, 62% of nurses reported that their skill to engage patients in shared decision-making needs minor or significant improvement and 49% reported low-to-moderate confidence to do so. Significant differences in relevance, current level of skill and confidence were seen by country (Table 4). Participants reported that the involvement of patients in treatment decisions was complicated due to several factors, including patient characteristics and addressing unique patient profiles. The involvement of patients in their treatment decisions was reported as challenging due to the integration of their preferences and treatment goals as demonstrated by the following quote:

And patients can be quite straightforward or they can be very complex and their care needs are often a very individual nature, so it requires quite a level of knowledge and skill to be able to meet each individual’s needs appropriately depending on their situation, their clinical presentation, a number of factors. – Nurse, United Kingdom

The integration of patients’ short-term and long-term goals into the treatment plan was reported as an “essential” skill for 58% of neurologists. However, 58% reported that their skill to integrate patient goals into the treatment plan needs minor or significant improvement. Confidence in this skill was reported as low to moderate by 39% of neurologists. Relevance of this skill was significantly different by country (Table 3).

Of nurses authorised to prescribe treatment, 66% reported that integration of patients’ short-term and long-term goals into the treatment plan is essential to their role. More than half of nurses authorised to prescribe (52%) reported needing minor to significant improvement in their skill to integrate patient goals into the treatment plan and 45% reporting their confidence as low to moderate. Country differences were not explored due to the limitations of sample size for nurses authorised to prescribe.

### Challenges in communicating with patients and their caregivers

Communication was reported as important not only with the patient but also with the caregiver:

And I’m not going to just say the patient; it’s the patient and the patient family. If you treat enough MS patients, you can tell that it’s, this is not just the patient … it’s the whole family. Especially the wife or the son or the daughter or whoever is close to the patient. – Neurologist, United States

With regard to discussing caregivers’ expectations, 46% of neurologists rated their confidence as low to moderate.

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**Table 3. Summary of identified themes for neurologists by country.**

| Challenges in assessing patient adherence | GER (n=20) | SP (n=20) | FRA (n=21) | UK (n=21) | ITA (n=20) | USA (n=30) | Total | Sign. Diff.* |
|------------------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-------|-------------|
| Assessing patient adherence to their treatment plan | 60% | 85% | 38% | 57% | 50% | 63% | 59% | SP > FRA |
| (% who reported skill as essential) | | | | | | | | |
| (% who reported needing improvement) | 60% | 70% | 76% | 62% | 60% | 53% | 63% | N/S |
| (% who reported 1-low to 3-moderate confidence) | 35% | 65% | 48% | 48% | 55% | 33% | 46% | N/S |
| Challenges in the shared-decision making process with patients | | | | | | | | |
| Engaging patients in shared-decision making | 85% | 65% | 43% | 72% | 50% | 77% | 66% | GER > FRA |
| (% who reported skill as essential) | | | | | | | | |
| (% who reported needing improvement) | 45% | 60% | 71% | 43% | 55% | 27% | 49% | FRA > USA |
| (% who reported 1-low to 3-moderate confidence) | 30% | 45% | 38% | 48% | 40% | 17% | 35% | N/S |
| Integration of patient’s short-term and long-term goals | 55% | 90% | 48% | 43% | 45% | 67% | 58% | SP > FRA |
| (% who reported skill as essential) | | | | | | | | |
| (% who reported needing improvement) | 50% | 65% | 57% | 57% | 65% | 53% | 58% | N/S |
| (% who reported 1-low to 3-moderate confidence) | 35% | 50% | 48% | 43% | 40% | 27% | 39% | N/S |
| Challenges in communicating with patients and their caregivers | | | | | | | | |
| The caregiver’s expectations | 50% | 70% | 57% | 52% | 30% | 27% | 46% | SP > USA |
| (% who reported 1-low to 3 moderate confidence) | | | | | | | | |
| Disagreement between patients and caregivers regarding treatment choices | 60% | 75% | 62% | 76% | 50% | 53% | 62% | N/S |
| (% who reported 1-low to 3-moderate confidence) | | | | | | | | |
| The impact of the disease on quality of life | 45% | 40% | 48% | 38% | 35% | 27% | 36% | N/S |
| (% who reported 1-low to 3-moderate confidence) | | | | | | | | |

*Significant differences between pairs of countries using ANOVA and Tahmane’s T2 post hoc tests (p<0.05). N/S indicates measures for which the ANOVA was not significant and, thus, for which the post hoc tests were not performed. NSD (no specific difference) indicates measures where the ANOVA was significant, but specific post hoc differences could not be identified.
with significant differences between countries. Low-to-moderate confidence was reported by 43% of nurses with regard to discussions of caregivers’ expectations with no significant differences by country.

Over half of neurologists (62%) reported that their confidence to discuss disagreements between patients and their caregivers was low to moderate (with no differences by country). Almost half of nurses (48%) reported low-to-moderate confidence in discussing disagreements between patients and their caregivers (with no significant differences in confidence by country).

At least one-third of neurologists (36%) and nurses (33%) reported that their confidence in discussing the impact of MS QoL with their patients was low to moderate. There were significant differences by country for nurses but not neurologists (Tables 3 and 4).

### Discussion

This international study identified three major interdependent challenges experienced by practising neurologists and nurses in their own skills and confidence effectively to communicate with their MS patients (and caregivers). These challenges arise in 1) assessing patient adherence, 2) the shared decision-making process and 3) communicating with patients and their caregivers, and could in turn impact the effectiveness of the patient–provider clinical relationship. The qualitative data provided the authors with in-depth data as to the issues and challenges experienced by providers in MS, and their potential underlying causalities. Furthermore, the qualitative data drove the design of the more targeted quantitative survey. The use of both qualitative and quantitative methods contributes to the trustworthiness of findings and should be considered for future studies of a similar nature.

The study findings illustrate the existing complexities that MS clinicians face in developing clinical relationships with their patients. The potential underlying causal factors of these challenges need to be taken into consideration in order to engage healthcare providers in more effective, patient-centred clinical practice. Although challenges were reported in all countries, there were slight nuances, which could be explained by contextual differences in each country. Generally, significant differences were most often identified in the self-reported relevance of skills in practice, which could be explained by contextual differences in the different contextual factors in each country. The perceived relevance of these skills in practice could be a result of the different contextual factors in the targeted countries. For instance, variations in the availability of healthcare resources, access and reimbursement to specific MS therapies, as well as the time since approval of certain therapies, could all impact the reported relevance of the items assessed. These factors should be taken into consideration for the design of CME initiatives. Consistent differences were not identified by demographic factors such as caseload and years of practice, supporting the notion of designing CME initiatives globally and then adapting to the local context within each country. Although there were no differences by demographic factors, potential trends in responses could be a result of other confounding factors that were not

### Table 4. Summary of identified themes for nurses by country.

| Challenge                                                                 | GER (n=20) | SP (n=20) | FRA (n=22) | UK (n=20) | ITA (n=20) | USA (n=30) | Total | Sign. Diff. |
|---------------------------------------------------------------------------|------------|-----------|------------|-----------|------------|------------|-------|-----------|
| **Challenges in assessing patient adherence**                            |            |           |            |           |            |            |       |           |
| Assessing patient adherence to their treatment plan                      | 60%        | 80%       | 59%        | 90%       | 60%        | 80%        | 73%   | N/S       |
| (% who reported skill as essential)                                       |            |           |            |           |            |            |       |           |
| (% who reported needing improvement)                                     | 50%        | 60%       | 86%        | 30%       | 75%        | 53%        | 60%   | FRA > UK  |
| (% who reported 1-low to 3-moderate confidence)                         | 55%        | 40%       | 68%        | 20%       | 50%        | 53%        | 48%   | FRA > UK  |
| **Challenges in the shared-decision making process with patients**      |            |           |            |           |            |            |       |           |
| Engaging patients in shared decision-making                              | 65%        | 70%       | 59%        | 95%       | 55%        | 73%        | 64%   | UK > ITA  |
| (% who reported skill as essential)                                       |            |           |            |           |            |            |       |           |
| (% who reported needing improvement)                                     | 70%        | 70%       | 86%        | 25%       | 75%        | 50%        | 62%   | ITA > UK  |
| (% who reported 1-low to 3-moderate confidence)                         | 45%        | 65%       | 59%        | 20%       | 65%        | 43%        | 49%   | FRA > UK  |
| Integration of patient’s short-term and long-term goals                  | 0%         | 100%      | 67%        | 21%       | 50%        | 33%        | 66%   | N/A       |
| (% who reported skill as essential)                                       |            |           |            |           |            |            |       |           |
| (% who reported needing improvement)                                     | 50%        | 100%      | 100%       | 50%       | 100%       | 33%        | 52%   | N/A       |
| (% who reported 1-low to 3-moderate confidence)                         | 0%         | 100%      | 67%        | 50%       | 50%        | 33%        | 45%   | N/A       |
| **Challenges in communicating with patients and their caregivers**      |            |           |            |           |            |            |       |           |
| Integration of patient goals                                             | 40%        | 40%       | 59%        | 50%       | 60%        | 20%        | 43%   | NSD       |
| (% who reported 1-low to 3-moderate confidence)                         |            |           |            |           |            |            |       |           |
| Disagreement between patients and caregivers regarding treatment choices| 50%        | 45%       | 59%        | 40%       | 60%        | 37%        | 48%   | N/S       |
| (% who reported 1-low to 3-moderate confidence)                         |            |           |            |           |            |            |       |           |
| The impact of the disease on quality of life                             | 25%        | 35%       | 50%        | 20%       | 60%        | 17%        | 33%   | ITA > USA |
| (% who reported 1-low to 3-moderate confidence)                         |            |           |            |           |            |            |       |           |

*Significant differences between pairs of countries using ANOVA and post hoc tests (p < 0.05). N/S indicates measures for which the ANOVA was not significant and, thus, for which the post hoc tests were not performed. NSD (no specific difference) indicates measures where the ANOVA was significant, but specific post hoc differences could not be identified. NA indicates that the test for country differences was not done for questions asked only to nurses authorised to prescribe.

*Only asked to nurses authorised to prescribe.
taken into consideration in the current study. Future studies could investigate the impact of providers’ motivation to learn and take other personality characteristics into consideration.

The findings from this study provide material for self-reflection amongst MS providers regarding their own clinical practice and their pivotal role in assessing and guiding patient adherence. Furthermore, improving healthcare providers’ confidence to involve their patients in meaningful treatment discussions represents an important learning goal for CME interventions and/or practice-supporting tools for neurologists and nurses. Such initiatives can also be valuable in resolving potential disagreements between doctors and patients about reasonable risks of emerging therapies for MS.20

Neurologists and nurses do not treat and manage MS in a vacuum. Instead, they must actively and skilfully engage with a patient population, who can be highly informed (or misinformed) and who may have strong expectations of their healthcare providers to understand their realities. This requires additional strengths and skills that are not historically a focus of graduate medical and nursing programmes internationally. For example, in MS, clinicians need effectively to negotiate and counsel patients and be attuned to the fact that as healthcare providers, they do indeed have a positive (or conversely a negative) influence on patient adherence. Neurologists and nurses practising in MS who believe and understand how they can impact patient adherence are likely to be more committed and motivated to proposing alternative strategies to improve adherence and are less likely to experience provider frustration. Studies have demonstrated that low levels of provider frustration and high levels of motivation facilitate effective patient–provider communication21,22 and enable an increase in shared goal setting, collaborative treatment approaches and ultimately improved adherence.23 Establishing an open and honest patient–provider communication, setting realistic expectations about therapy and providing ongoing education about MS are responsibilities that both the clinician and patient must embrace and be attuned to the field to be equipped optimally to do so.23 Internationally, the availability of treatment options varies and could represent an important factor limiting the provision of patient-centred care. In addition, given the recent approval of new therapies in certain countries, and the short time since their approval, providers may have inadequate experience with these treatments and are, therefore, less confident in their ability to discuss and position these treatments to their patients.

There currently is growing emphasis and awareness on patient involvement in treatment decisions.24 The participants in this study reported that skills in engaging patients in treatment decisions were essential to their role. Interestingly, although the majority reported these skills as essential, there was still a surprisingly large proportion of neurologists and nurses in this study who reported perceiving the skill as only somewhat relevant to their role. Previous studies in the field also report that MS providers do not optimally include their patients in their treatment decisions.25,26 While the willingness of the patient to be involved in decisions regarding his/her condition varies, it is nevertheless the responsibility of the healthcare provider to gauge the patient’s desire to be involved and tailor their interactions accordingly.27 This involves using communication skills that allow creating an open and trusting patient–provider relationship in which providers demonstrate understanding of the patient’s perspective, values and beliefs, and discussions of the expectations regarding the roles of both parties.27,28

Through effective communication, patients obtain better understanding of their condition as well as the associated risks and benefits of treatment.29 A better overall understanding and management of patient expectations regarding the current and emerging MS treatments, as well as discussions of side-effects and side-effect management, will help maintain patient adherence to treatment by making them better informed.

Communication with caregivers is another important component in the treatment and management of patients with MS. However, studies show that family members of people with MS report not receiving sufficient information throughout the disease course, even at the time of the first symptoms.30 The findings from this international study also indicate that healthcare providers could benefit from CME interventions targeted at improving their skill and confidence effectively to communicate with the patients’ caregivers and, in particular, to negotiate disagreements between patients and caregivers.

The complexities of optimal treatment and the best approaches to MS management are clearly essential components in caring for patients with MS. However, given the widespread impact of the disease across a patient’s lifespan (i.e. physical, psychological, emotional and social), clinicians require more knowledge regarding treatment for the disease. Neurologists and nurses specialising in MS recognise that there is a gap in delivering a holistic approach to treating and managing their patients. As a result, there needs to be a greater emphasis placed on the development of provider communication competencies, not only through CME initiatives but also as an integrated core component of graduate medical education and nursing curricula internationally. Furthermore, given that the identified challenges in this study relate not just to knowledge, but also to communication skill and confidence issues, educational interventions will need to move beyond traditional formats (i.e. symposia) to interactive opportunities for learners to apply their acquired knowledge to real clinical scenarios. Furthermore, both neurologists and nurses reported gaps in their ability to communicate with patients, suggesting the potential for interprofessional educational initiatives or multidisciplinary learning opportunities.
Limitations

Given that the goals of this study were to identify gaps, challenges and barriers, less attention was given to areas in which care is optimal. The methodology is based on self-report and is therefore subject to potential bias due to erroneous self-assessment. To mitigate potential bias, triangulation was used to strengthen the trustworthiness of the findings. Self-selection bias was also a possibility, as participation in the study was voluntary; however, purposive sampling improves the probability of having a sample that is representative of the targeted population. Finally, the perspective of the patients with MS and their families and caregivers should be included in future studies to better understand the clinical relationship.

Conclusion

For clinicians to practise effectively and efficiently in the treatment and management of MS, they must navigate treatment of a complex condition, and simultaneously be skilled and confident in their patient–provider communications. Should they lack proficiency in the latter, patients are likely to be less engaged and less compliant, rendering outcomes disappointing for both clinician and patient. Results suggest that neurologists and nurses caring for people with MS would be receptive to education to develop their skills with regard to communication with patients and their caregivers. These findings potentially allow for self-reflection by neurologists and nurses of the gaps in their clinical practice leading to the deployment of local performance improvement strategies aimed at enhancing clinicians’ ability effectively to communicate with their patients, ultimately leading to improved patient treatment adherence and better MS outcomes.

Disclosures

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