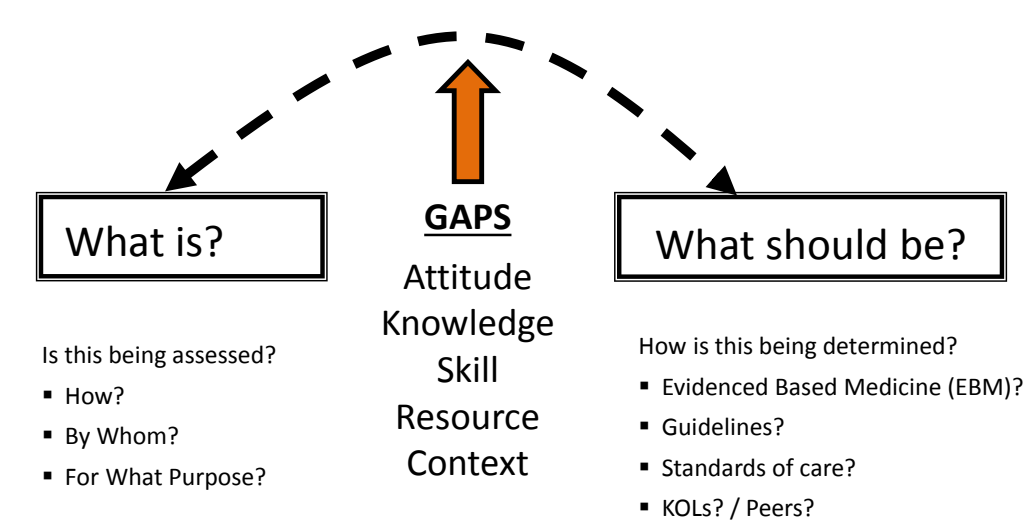# NURSING CHALLENGES IN THE CARE OF PEOPLE WITH MULTIPLE SCLEROSIS: RESULTS FROM AN INTERNATIONAL NEEDS ASSESSMENT

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BACKGROUND

- International needs assessment conducted in 6 countries
- Goal: to better understand knowledge, skill, and confidence issues of healthcare providers involved in the care of people with Multiple Sclerosis (MS)
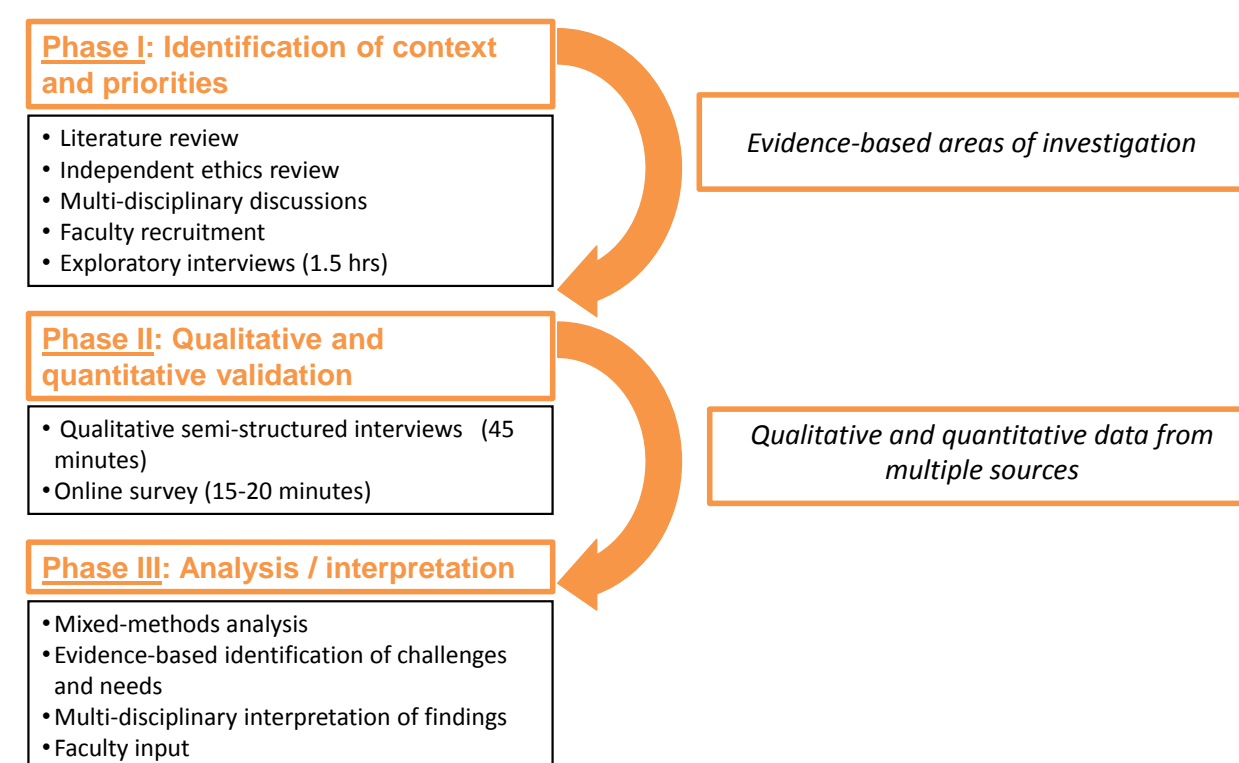- Needs assessment sample included nurses, neurologists, radiologists, and pharmacists.

NEEDS ASSESSMENTS

GAPS
Attitude
Knowledge
Skill
Resource
Context

What is?

What should be?

Is this being assessed?
- How?
- By Whom?
- For What Purpose?

How is this being determined?
- Evidenced Based Medicine (EBM)?
- Guidelines?
- Standards of care?
- KOLs? / Peers?

OBJECTIVE

To highlight the specific challenges for nurses in the treatment, management and monitoring of people with MS.

METHODOLOGY

Phase I: Identification of context and priorities
- Literature review
- Independent ethics review
- Multi-disciplinary discussions
- Faculty recruitment
- Exploratory interviews (1.5 hrs)

Evidence-based areas of investigation

Phase II: Qualitative and quantitative validation
- Qualitative semi-structured interviews (45 minutes)
- Online survey (15-20 minutes)

Qualitative and quantitative data from multiple sources

Phase III: Analysis / interpretation
- Mixed-methods analysis
- Evidence-based identification of challenges and needs
- Multi-disciplinary interpretation of findings
- Faculty input

ANALYSIS

- Qualitative data analyzed using thematic coding analysis
- Quantitative data analyzed using frequencies, and analyses of variance/Tahmane's T2 post-hoc tests were used to identify differences by country
- Qualitative and quantitative findings were triangulated to strengthen the trustworthiness of the findings.

RESULTS

Sample of Nurses

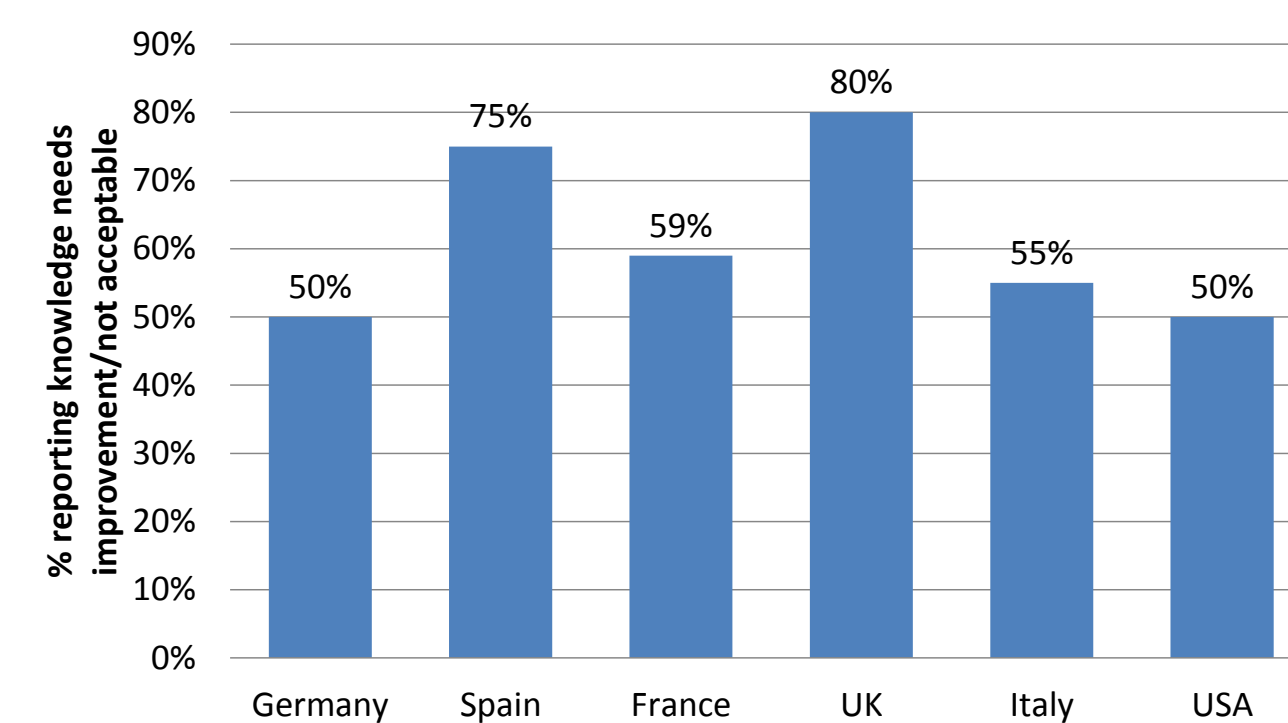| Sample	
Total Nurses	146
Gender n (%)	
Men	33 (23)
Women	113 (77)
Country n (%)	
Germany	22 (15)
Spain	22 (15)
France	24 (16)
United Kingdom	22 (15)
Italy	22 (15)
United States	34 (23)
Practice Setting n (%)	
Private	32 (22)
Community-based	36 (25)
Academic-based	74 (51)
Other	4 (2)
Years of Practice n (%)	
5-10 years	80 (55)
11-20 years	49 (34)
More than 20 years	17 (11)
Caseload n (%)	
5- 50 patients/yr	47 (33)
50-150 patients/yr	35 (24)
More than 150 patients/yr	62 (43)

The following are 7 substantive challenges reported by nurses across countries as a result of knowledge, skill and confidence issues:

1. The precise diagnosis of MS
2. Individualization of treatment
3. Combination and sequencing of treatment
4. Monitoring patient status
5. Managing quality of life issues
6. Managing psychosocial aspects of MS
7. Patient communication and engagement
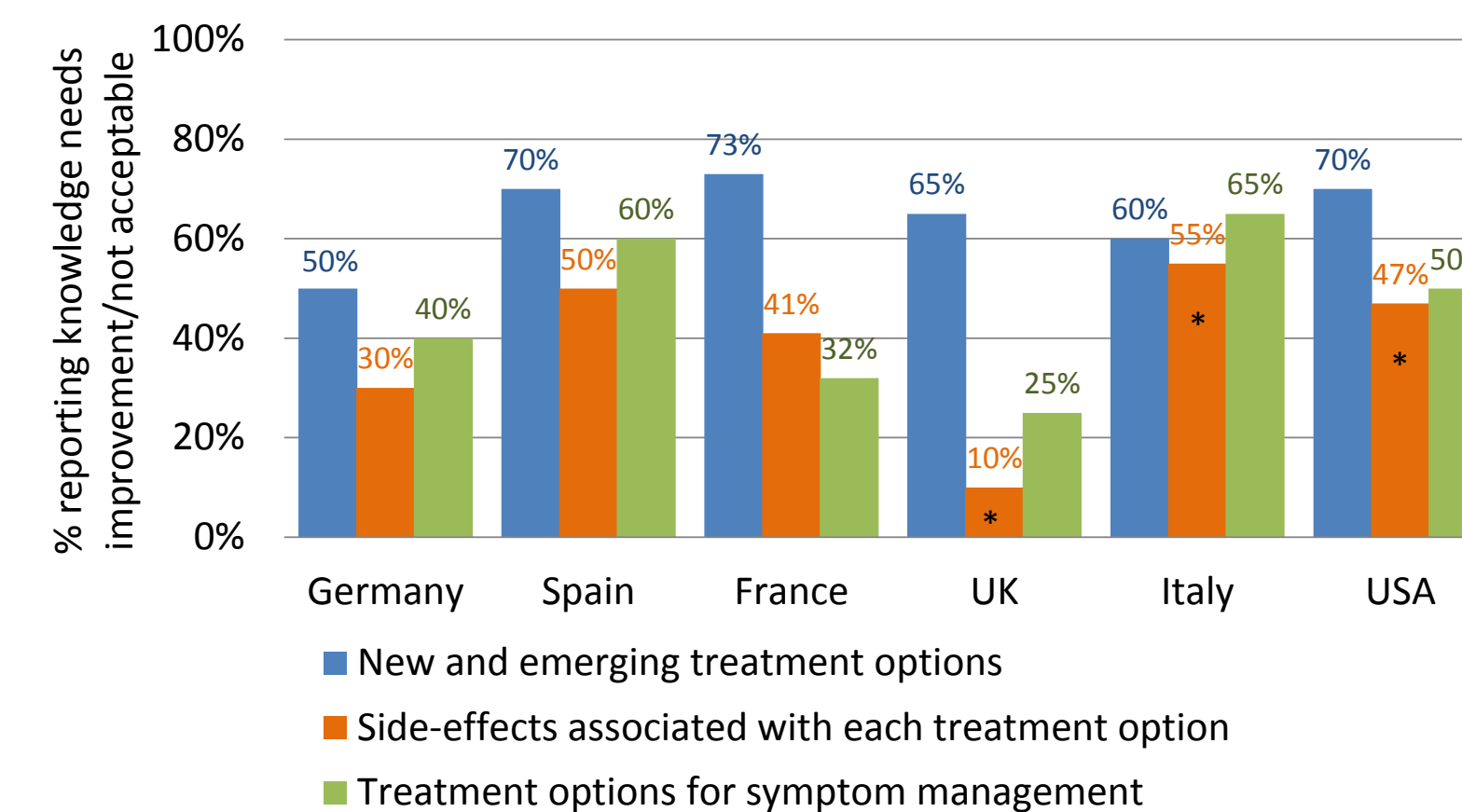
Highlighted gaps are presented

MONITORING PATIENT STATUS

Knowledge of new and emerging methods to monitor response to treatment was reported by 50% or more of Nurses in each country as not acceptable/could be improved

MANAGING QUALITY OF LIFE ISSUES

- 65% of nurses reported that their knowledge of newly approved treatments was not acceptable/could be improved
- Greater variability was seen between countries regarding knowledge of treatment side-effects

* Significant differences between pairs of countries using ANOVA and Tahmane's T2 post-hoc tests (p < 0.05).

- 63% of nurses reported skill detecting treatment side-effects as not acceptable/could be improved
- Mean confidence in detecting treatment side effects was 3.5 (1-low to 5-optimal)

Proactively Detecting treatment side-effects	GER (n=20)	SPA (n=20)	FRA (n=22)	UK (n=20)	ITA (n=20)	USA (n=30)	Total	Sign. Diff*
% reporting skill as essential to their role	60%	70%	55%	85%	40%	66%	64%	UK>ITA
% reporting their current skill needs improvement/not acceptable	65%	70%	64%	45%	90%	50%	63%	ITA>UK ITA>USA
Mean rating of confidence (1-low to 5-optimal) and SD	3.5 (0.9)	3.4 (1.1)	3.4 (1.2)	3.9 (1.1)	3.2 (0.9)	3.4 (1.0)	3.5 (1.0)	N/S

* Significant differences between pairs of countries using ANOVA and Tahmane's T2 post-hoc tests (p < 0.05).

"There's so many new therapies arising in the market all of the time, being able to keep abreast of all of the changes and developments, and fully understanding the medications, the risks, how to talk to patients about that because that's key."
— Nurse, UK

*"Unfortunately, each side-effect is different, but each drug has some that can be important. In fact, the challenge is to make a choice, having the patient accept all the side-effects he will need to. I don't know if you know the French expression: having to choose between pest and cholera. That's it. **That is the challenge. It's not about selecting this or that treatment, it's about reminding yourself that they all have side-effects, and that you will need to choose one of them.**"*
— Nurse, France

PATIENT COMMUNICATION AND ENGAGEMENT

- 64% of nurses reported skill in engaging patients in shared decision-making not acceptable/ could be improved

Engaging patients in shared decision making	GER (n=20)	SPA (n=20)	FRA (n=22)	UK (n=20)	ITA (n=20)	USA (n=30)	Total	Sign. Diff*
% reporting skill as essential to their role	65%	70%	59%	95%	55%	73%	64%	UK>ITA
% reporting their current skill needs improvement/not acceptable	70%	70%	86%	25%	75%	50%	62%	ITA>UK FRA>UK
Mean rating of confidence (1-low to 5-optimal) and SD	3.6 (1.0)	3.4 (0.8)	3.6 (0.8)	4.3 (0.8)	3.4 (1.1)	3.8 (1.0)	3.7 (1.0)	UK>FRA
Discussing the impact of disease on quality of life								
Mean rating of confidence (1-low to 5-optimal) and SD	4.2 (0.8)	3.9 (1.1)	3.6 (1.1)	4.2 (1.1)	3.2 (1.1)	4.1 (0.7)	3.9 (1.0)	USA>ITA
Patient preferences that are against my recommendations								
Mean rating of confidence (1-low to 5-optimal) and SD	3.7 (1.1)	3.4 (1.1)	2.8 (0.7)	3.7 (0.7)	3.0 (0.9)	3.5 (0.7)	3.5 (0.9)	UK>FRA ITA>FRA USA>FRA

* Significant differences between pairs of countries using ANOVA and Tahmane's T2 post-hoc tests (p < 0.05).

"The challenges of a nurse is to manage the expectation of the patient, manage their fears and anxieties and help to support them with their knowledge of the condition and to work with them, their families (…) but it's very much about looking at that person as an individual, being able to use your, as an MS nurse, knowledge and skills to tailor a plan individual for that person (…) so it's very individual."
— Nurse, UK

DISCUSSION

- Nurses reported 7 substantive challenges due to knowledge, skill and confidence issues
- The challenges identified in this study were common to all countries, with some nuances.
- Gaps in knowledge, skills and confidence potentially impact nurses' ability to provide personalized care to their patients

IMPLICATIONS

Findings allow nurses to reflect on their own clinical practice and identify areas needing improvement
Results can be used to inform the design of education initiatives for MS nurses to enhance ability to engage patients in their treatment ultimately leading to more individualized care and improved patient outcomes