Dutch Guideline Adherence First-Line Injection Therapy Multiple Sclerosis

A.E.J. Slettenaar[a], M.C.M.Booy[b], L. Trommelen[c], T. Kempkens[d], K.Harrison[e], N.J.M. Arts[f], A. Baars[g], L.H. Visser[c,h]

[a]Medisch Spectrum Twente – Enschede, [b]Amphia Ziekenhuis – Breda, [c]TweeSteden Ziekenhuis – Tilburg/Waalwijk, [d]Zuyderland Ziekenhuis – Sittard, [e]Tergooi – Blaricum, [f]Winkler Kliniek, Pro Persona – Wolfheze, [g]Ziekenhuis Rijnstate – Arnhem, [h]St. Elisabeth Ziekenhuis – Tilburg

Stichting Verpleegkundig Specialisten MS

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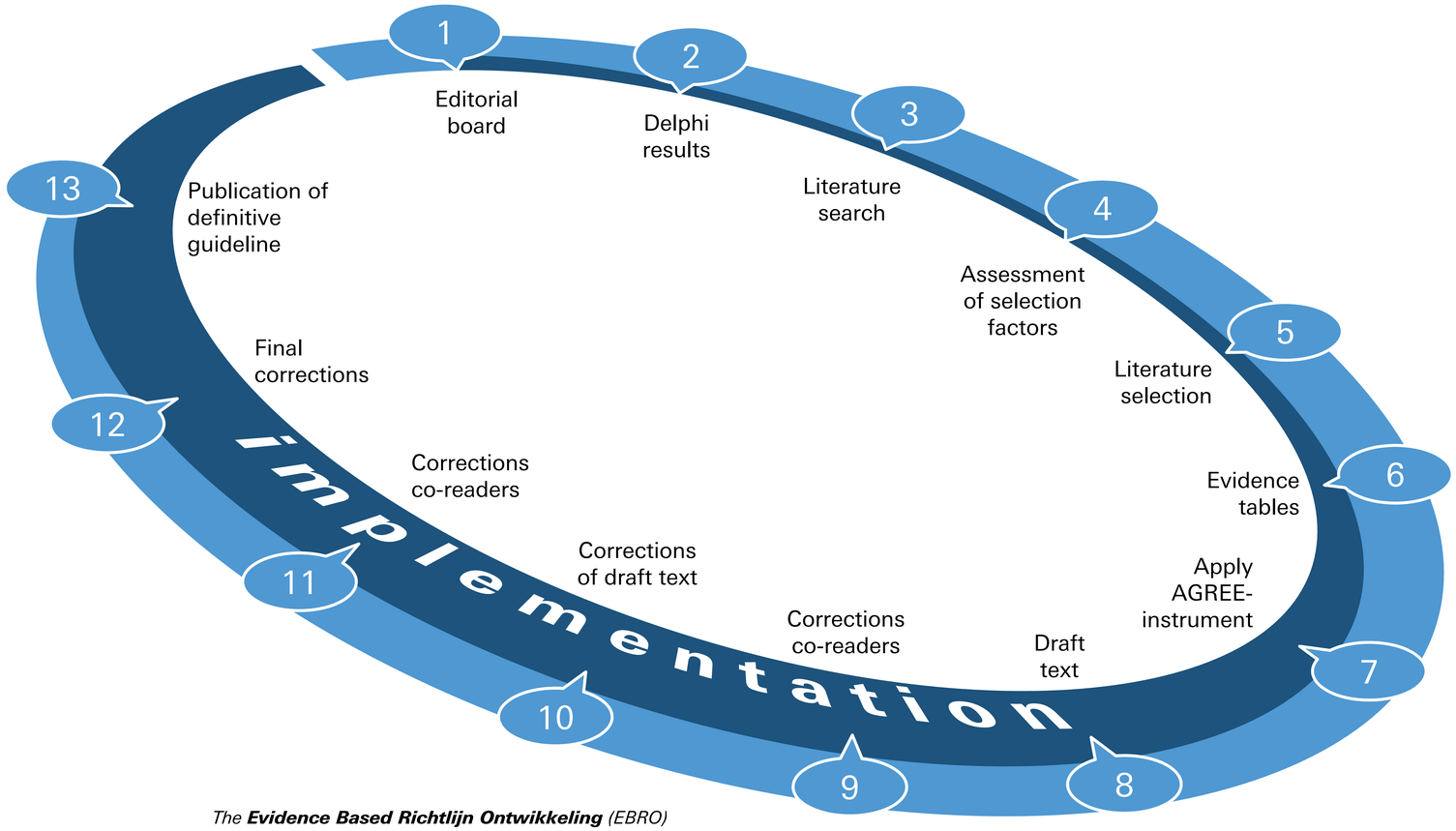
Background

Adherence to first-line therapy among patients with Multiple Sclerosis (MS) is poor. This could be associated with increased healthcare costs and a need for high-risk escalation therapies. Patient behaviour may be influenced by different factors; experiencing disease symptoms, and other side effects associated with first-line injection therapy, or the way information on interferon bèta or glatiramer acetate injection therapy is provided in clinical practice.

Objectives

This guideline supports caregivers in achieving a uniform approach on adherence among patients with MS treated with first-line injection therapy.



*The **Evidence Based Richtlijn Ontwikkeling** (EBRO) as applied to the development of this guideline*

Methods

The factors that influence adherence to first-line injection therapy were selected: **Flu-like symptoms**, **Injection-site reactions (ISR's)**, **Fatigue**, **Depression**, **(Injection) Anxiety** and **Cognitive dysfunction**. First, Digital Delphi rounds with MS-nurses were used to achieve consensus on how to deal with these factors that influence adherence. The consensus was included in the guideline, which was developed with the Evidence Based Richtlijn Ontwikkeling (EBRO) method, structurally applying evidence levels to scientific literature.

Results

Fifty Delphi round theses were accompanied by evidence from scientific studies. Conclusions and recommendations for each factor that influences adherence in clinical practice were based on scientific evidence and other important aspects, like patient preferences, availability of special techniques or expertise, organizational aspects, social consequences and costs. To optimize adherence, one can use screening instruments like the Morisky Medication Adherence Scale (MMAS-8), the Modified Fatigue Impact Scale (MFIS-21), the Hospital Anxiety and Depression Scale (HADS) and the Cognitive Failure Questionnaire (CFQ). A guideline documenting the outcomes was written and implemented in clinical practice in the Netherlands.

Conclusions

The first step to improve adherence of patients with MS is to identify the factors that influence adherence on regular monitoring visits. **Flu-like symptoms**, **Injection-site reactions**, **Fatigue**, **Depression**, **(Injection) Anxiety** and **Cognitive dysfunction** have an effect on patient adherence. To verify adherence, 'ask open questions without a reproachful undertone'.

Recommendations for MS-professionals

- **Adherence:** use the MMAS-8 to evaluate the risk of treatment failure.
- **Flu-like symptoms:** educate your patients on frequency and type of flu-like symptoms and offer advice on treatment (titration, injection time and dose-reduction).
- **ISR's:** make routine check-ups on skin inspection. Advice should include usage of dry-needles, or shorter needles, timing of skin cooling, skin cleaning and the use of an injection rotation scheme.
- **Fatigue:** consider it a multifactorial problem with psychosocial factors influencing pysical problems and vice versa. For quantification of fatigue use the MFIS-21.
- **Depression:** ask your patients a simple "Are you depressed?" question before start of disease modifying therapy and periodically thereafter. If the answer to the simple question is "Yes", you should administer the HADS.
- **Injection anxiety:** Refer to a skilled psychologist for cognitive behaviour therapy. This should lead to a better selfcare and a diminishing of injection anxiety.
- **Cognition:** administer a screening test, including at least the PASAT and SDMT and ask a hetero-anamnese. Provide step-by-step oral and written instructions and repeat as much as necessary.

Correspondence : A.E.J. Slettenaar, MANP, MSCN, RN – Medisch Spectrum Twente, Koningsplein 1, 7500 KA, Enschede, The Netherlands – **mstherapietrouw@gmail.com**