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Obstacles and motivations to influenza and pneumococcal vaccination in patients with rheumatoid arthritis. A qualitative study. Comment on: “Pneumococcal and influenza vaccination rates in patients treated with corticosteroids and/or immunosuppressive therapies for systemic auto-immune diseases: A cross-sectional study” by Assala et al., Joint Bone Spine 2017;84:365–6



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In an article published in *Joint Bone Spine*, Assala et al. reported a vaccination rate against influenza and pneumococcus of 58% in 105 patients with auto-immune diseases. They suggested that the main predictor of failure to receive vaccination was the lack of physician's recommendation [1]. In this correspondence, we wish to add further data to support the conclusions of this article.

Rheumatoid arthritis (RA), another chronic rheumatic disease, is associated with a higher risk of infection, especially because of immunosuppressive treatments. To decrease this risk, influenza and pneumococcal vaccinations have been recommended prior to initiating biological treatments [2]. However only 20–30% patients were appropriately vaccinated [3]. We performed a qualitative study to better understand the obstacles encountered in RA patients regarding influenza and pneumococcal vaccinations.

Semi-directed nurse-led interviews of RA patients were realized. Four topics were analyzed: obstacles and motivations to influenza vaccination, obstacles and motivations to pneumococcal vaccination, post-vaccination follow-up, and information sources. Fifteen interviews were conducted involving 11 women and 4 men, with a mean age of 63 years. All patients were undergoing at least one immunosuppressive therapy. Most (80%) were vaccinated against pneumococcus, and 33% against influenza.

The obstacles to vaccinations primarily concerned fears of side effects of vaccination especially with the influenza vaccination. Patients also reported anxieties with the vaccines' excipients, overdoses, or disease reactivation. Moreover, media impact, contradictory information, the fact that vaccinations were not always proposed, and the lack of traceability were other obstacles to vaccination. Influenza was often considered as a benign disease and the vaccine poorly efficient. Patients who ever had influenza were more motivated towards vaccination. The higher motivation for the pneumococcal vaccination was the protection provided by the

vaccine. The perception of frailty and increased infection risk associated with RA were other sources of motivation, especially when vaccination was highly recommended by the physician. Verbatim quotations for the four themes are shown in Appendix A, Table S1 [See the supplementary material associated with this article online].

Our study results provide information that reinforces the conclusions of Assala that vaccination rate against influenza or pneumococcus in rheumatic diseases is not sufficient. Influenza vaccination appeared to be poorer perceived, with more fears related to it. Concerning pneumococcus vaccination, the vaccine was less well-known, and thus better accepted. Healthcare professionals have an important role to inform patient about vaccination and to appropriately answer their questions. In rheumatology, for instance, the COMEDRA and COMORA studies revealed that a nurse-led intervention was useful for improving influenza and anti-pneumococcal vaccination in patients with chronic inflammatory arthritis [4,5], as were patient education programs [6,7].

Disclosure of competing interest

The authors declare that they have no competing interest.

Appendix A. Supplementary data

Supplementary material related to this article can be found, in the online version, at doi:<https://doi.org/10.1016/j.jbspin.2018.06.006>.

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