

STUDY ON THE THERAPEUTIC ADHERENCE BY PATIENTS WITH PSORIASIS IN FRANCE: A STUDY OF 181 PATIENTS

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BACKGROUND: Medication adherence is an important challenge when treating psoriasis that requires a long-term management to induce and maintain clinical remission. Low adherence to therapies in psoriasis decreases treatment outcomes and increases the total healthcare costs (1). A majority of treatment failures may also be attributed to poor adherence to medications (2,3).

OBJECTIVES: The aim of this study was to determine the prevalence of adherence and to identify specific factors, which can impact medication adherence in patients with psoriasis.

METHODS: A cross-sectional study was conducted in France through Carenity, an online patient community. Patients registered as psoriasis or psoriatic arthritis were invited to participate in an Internet-based survey from January to June 2019. Patients receiving treatment and follow-up by a physician were eligible to complete the questionnaire. Patients who complied perfectly with their treatment will be considered to be observers of therapy. Data were analysed for potential predictors of adherence in an explorative manner. The differences between the groups were tested with a χ^2 test, and Fisher's exact test was used only on a smaller sample. The level of significance was set at $p < 0.05$.

RESULTS: 181 patients (mean age 51 years, 70% were women) were included. 62% were supported by a dermatologist including 30% in a hospital and 32% independently. Psoriasis had been diagnosed on average 16 years ago. 69% had topical treatment (of which 68% as sole treatment), 31% had systemic treatment (methotrexate, acitretine, apremilast) and 20% were on biologics and 6% phototherapy. Only 53% of patients had reported a good adherence to their treatment.

Poor compliance had been reported in 44% of the patients:

- 27% reported to sometimes involuntarily forget their treatment
- 11% reported to sometimes voluntarily forget their treatment for several reasons (adverse effects, alcohol, etc.)
- 3% had indicated that they often forget to take their treatment
- 3% declared not to take their treatment voluntarily

Therapeutic adherence is significantly higher:

- When prescribed by a dermatologist 60% rather than by a general practitioner 30% ($p < 0.001$)
- When taking a biologic (81%) or a systemic treatment (79%) rather than when taking a local treatment (42%) ($p < 0.001$) (Table 1)
- If the consultation duration is higher than 15 min (61% vs. 42%, $p < 0.01$)
- If the duration of consultation is considered sufficient by the patient (63% vs 38%, $p < 0.001$)

The adherence of the patients does not depend on their optimism (56% versus 45%, $p = 0.20$).

For non-adherent patients, 48% had reported their difficulties to follow their treatment to their supporting physicians, 53% to their dermatologist and 42% to their general practitioner.

Table 1: Level of adherence according to the treatment

	Patients who are rigorously with their treatment n=96	Patients who generally follow their treatment well, while stating that they sometimes forget about it n=49	Patients who generally take their treatment well, while indicating that they sometimes do not take it voluntarily for various reasons (adverse effects, alcohol, etc.) n=19	Patients who often forget to take their treatment n=6	Patients who declare not to voluntarily take their treatment n=6	Other n=5
Topical treatment (vitamin D analogs, dermocorticoids, etc.)	42%	33%	13%	5%	4%	3%
Systemic treatment (methotrexate, acitretine, apremilast)	79%	14%	5%	0%	2%	0%
Phototherapy	40%	40%	20%	0%	0%	0%
Biologic	81%	11%	5%	0%	0%	3%

DISCUSSION: In France, there have been few adherence to treatment studies and few biological therapies long-term analysis in psoriasis. Our study confirms that adherence to treatment is higher for biological therapies than conventional systemic drugs and topical treatments. The lack of effectiveness of a treatment leads to non-adherence. According to Krueger *et al.*, 40% of patients are frustrated by the treatment ineffectiveness and 32% feel that the prescribed treatments for psoriasis were not aggressive enough (4).

Taking into account non-adherence factors related to the duration of consultation is key to optimize management of dermatological disorders. Consultation is an important resource in dermatological care. It is important to understand whether a longer consultation results in better outcomes in adherence. Patients' and physicians' satisfaction also matters.

CONCLUSION: This comprehensive study underlines the importance of patient education and information delivery to optimize patient adherence. Adherence to biologic therapies and to systemic treatment are very high in patients with psoriasis, which is consistent with a positive attitude to the treatment. Better information on the disease, medication and management of side effects, is key to improve adherence.

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