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Knowledge of and expectations about functional restoration programs for chronic low back pain: A mirror survey of 150 patients and 80 physicians in 2017



Chronic low back pain (cLBP), a multidimensional symptom [1,2], has a high prevalence in the general population, is costly [3,4] and ranks highest in terms of years lived with disability [5]. Its treatment and prevention therefore represent a major challenge for public health [6]. Functional restoration programs (FRPs) are multi-disciplinary rehabilitations programs that have demonstrated their effectiveness in cLBP [7–9]; however, they appear to be little known, and expectations are important in the health belief models. The objective of our study was to assess knowledge and expectations of patients and physicians regarding FRPs in cLBP.

This was a multicenter cross-sectional study in 2017 in 6 tertiary-care hospitals in France. Ethical committee approval was obtained (No. 18.08.21.46733). Consecutive cLBP patients and physicians dealing with these patients (rheumatologists or general practitioners, GPs) filled in a questionnaire [Appendix A, Document S1; see the supplementary material associated with this article online]. Knowledge of FRPs was assessed. Expectations regarding the process and results of these programs were collected and analyzed as ‘correct’ or not. Regarding the process, health professionals involved were scored correct if doctors and physiotherapist or sport coach were ticked but not occupational therapist, surgeon or osteopath and duration were scored if 3 to 6 weeks were ticked. Expectations were assessed on a multiple-choice list and

Table 1
Knowledge of FRPs.

	Patients n (%)	Physicians n (%)
By what means		
Physicians	35 (89.7%)	30 (51.7%)
Continuing medical education	0 (0.0%)	35 (60.3%)
Other	7 (17.9%)	16 (26.6%)
Health professionals involved perception		
Correct	13 (32.5%)	41 (69.5%)
Rheumatologist	26 (65%)	55 (93.2%)
Physiotherapist	36 (90%)	55 (93.2%)
Sport coach	24 (60%)	29 (49.2%)
Occupational therapist	3 (7.5%)	11 (18.6%)
Spine surgeon	3 (7.5%)	4 (6.8%)
Psychologist	16 (40%)	45 (76.3%)
Psychiatrist	4 (10%)	13 (22%)
Social worker	8 (20%)	24 (40.7%)
Osteopath	14 (35%)	8 (13.6%)
Duration perception		
Correct	26 (70.3%)	46 (78%)
< 1 week	1 (2.7%)	2 (3.4%)
1 to 3 weeks	10 (27%)	10 (17.2%)
3 to 6 weeks	26 (70.3%)	46 (79.3%)

FRPs: functional restoration programs. The denominator was 37 to 40 for patients and 58 to 59 for physicians.

were scored ‘correct’ if return to work was an expectation, and ‘fully correct’ if physical activity and pain management were both an expectation while healing not. This classification is arbitrary. Statistical analyses were performed on R, version 3.2.4.

Of 150 patients 110 (73.3%) had no knowledge of FRPs. Among the remaining 40 patients: 57.5% were women, median age was 47.5 years [interquartile range (IQR): 37–55], cLBP median duration was 4.5 years (IQR: 2.6–11.5) and median duration of days off work due to cLBP in the year was 3.0 months (IQR: 1.1–8.5). The source of knowledge of FRPs was for 35 (89.7%) a physician.

Of 80 physicians who responded to the questionnaire, 21 (26.2%) had never heard of FRPs (of whom, 95.2% were GPs) ($P < 0.0001$ vs. patients). Among the remaining 59 physicians, 40.7% were GPs, and 57.6% were rheumatologists.

Knowledge (Table 1) of health professionals involved (32.5 vs. 69.5%, $P = 0.0003$) and correct expectations (Table 2) (52.5% vs. 75.0%, $P = 0.02$) were higher for physicians than patients, but there was no significant difference for knowledge of duration (70.3% vs. 78.0%, $P = 0.47$) and fully correct expectations (22.5% vs. 27.1%, $P = 0.6$).

In conclusion, FRPs were largely unknown to cLBP patients even though they had a severe and disabling disease. Even those who were aware of these programs did not know what to expect while some studies have suggested that patients’ expectations of treatment outcomes are one of the most important prognostic factors for patients with LBP [10]. Physicians’ knowledge and expectations were higher but there was still a lack of knowledge, which is an issue

Table 2
Expectations regarding FRPs.

Expectations	Patients n (%)			Physicians n (%)		
Correct	21 (52.5%)			44 (75%)		
Fully correct	9 (22.5%)			16 (27%)		
	≤ 3 n (%)	≥ 7 n (%)	Median (IQR)	≤ 3 n (%)	≥ 7 n (%)	Median (IQR)
Resumption of sports activities	1 (2.9%)	23 (65.7%)	7 (6–10)	0	49 (83.1%)	8 (7–8)
Resuming work or improving working conditions	1 (2.5%)	21 (52.5%)	7 (5–8.25)	0	44 (74.6%)	8 (7–8)
Better pain management	0	22 (66.7%)	8 (6–9)	0	53 (89.8%)	8 (7–8)
Improved quality of life	1 (2.8%)	28 (77.8%)	8 (7–9)	0	53 (89.8%)	8 (7–8)
Decrease in pain	3 (9.7%)	17 (54.8%)	7 (5–7)	16 (27.1%)	30 (50.8%)	6 (3–8)
Healing	13 (41.9%)	6 (19.4%)	4 (1–5)	24 (40.7%)	13 (22.0%)	4 (2–6)

FRPs: functional restoration programs. The denominator was 31 to 40 for patients and 59 for physicians.

since physicians are a main source of information for patients. This may lead to an underutilization or misuse of the FRPs. Information campaigns are needed [6].

Disclosure of 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 <https://doi.org/10.1016/j.jbspin.2019.06.002>.

References

- [1] Einas A, Syamala B, Ganeswararao M. Health literacy and fear avoidance beliefs among women with chronic low back pain. *Phys Med Rehab Kuror* 2017;27:95–9.
- [2] Bailly F, Foltz V, Rozenberg S, et al. The impact of chronic low back pain is partly related to loss of social role: a qualitative study. *Joint Bone Spine* 2015;82:437–41.
- [3] Moore RA, Derry S, Taylor RS, et al. The costs and consequences of adequately managed chronic non-cancer pain and chronic neuropathic pain. *Pain Pract* 2014;14:79–94.
- [4] Depont F, Hunsche E, Abouelfath A, et al. Medical and nonmedical direct costs of chronic low back pain in patients consulting primary care physicians in France. *Fundam Clin Pharmacol* 2010;24:101–8.
- [5] James SL, Abate D, Abate KH, et al. Global, regional, and national incidence, prevalence, and years lived with disability for 354 diseases and injuries for 195 countries and territories, 1990–2017: a systematic analysis for the global burden of disease study 2017. *Lancet* 2018;392:1789–858.
- [6] Foster NE, Anema JR, Cherkin D, et al. Prevention and treatment of low back pain: evidence, challenges, and promising directions. *Lancet* 2018;391:2368–83.
- [7] Beaudreuil J, Kone H, Lasbleiz S, et al. Efficacy of a functional restoration program for chronic low back pain: prospective 1-year study. *Joint Bone Spine* 2010;77:435–9.
- [8] Poulain C, Kernéis S, Rozenberg S, et al. Long-term return to work after a functional restoration program for chronic low back pain patients: a prospective study. *Eur Spine J* 2010;19:1153–61.
- [9] Kamper SJ, Apeldoorn AT, Chiarotto A, et al. Multidisciplinary biopsychosocial rehabilitation for chronic low back pain: Cochrane systematic review and meta-analysis. *BMJ* 2015;350:h444.
- [10] Bialosky JE, Bishop MD, Cleland JA. Individual expectation: an overlooked, but pertinent, factor in the treatment of individuals experiencing musculoskeletal pain. *Phys Ther* 2010;90:1345–55.

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