

Impact of Chronic Low Back Pain from Physical, Psychological and Social Perspectives – Initial Results from a Global 8,990 Patient Survey: Citizens' Research

Van Griensven J,¹ Linton SJ,² Beck C,³ Abraham L,³ Wilhelm S,⁴ Constantinescu C,⁵ Fullen B⁶

¹ Pain Alliance Europe, Belgium; ² Örebro University; ³ Pfizer Ltd, Tadworth, UK; ⁴ Eli Lilly, Indianapolis, USA; ⁵ IPSOS SA, Switzerland; ⁶ University College Dublin, Ireland



Please scan this QR code with your smartphone app to view an electronic version of this poster.

INTRODUCTION

- Chronic low back pain (CLBP) is one of the most common and disabling chronic pain conditions,¹ affecting 5–10% of the global population^{2,3}
- The physical, emotional and psychological impact of CLBP on patients can be underestimated⁴

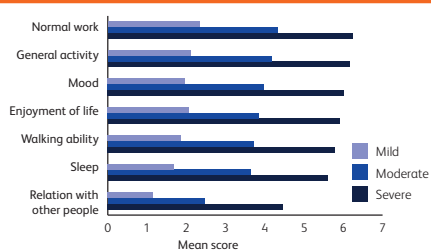
OBJECTIVE

- To quantify the scale, impact and burden of CLBP on patients' physical health, emotional well-being, employment and financial status

METHODS

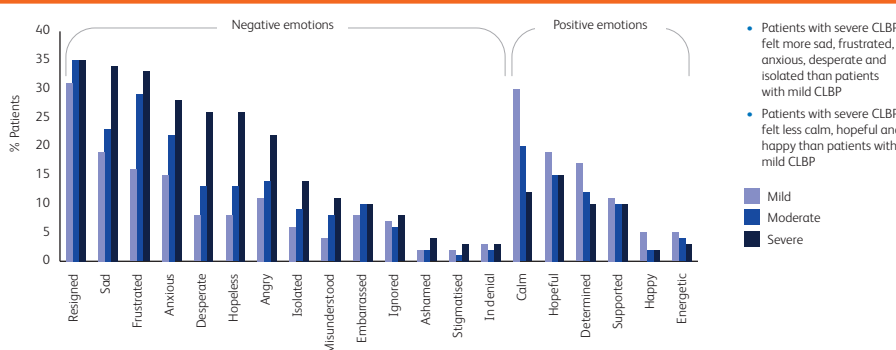
- Adults (≥18 years) with a self-reported physician diagnosis of CLBP were recruited via online market research consumer panels in 14 countries:⁵
- A robust screener ensured that only adults with a self-reported, physician confirmed diagnosis of CLBP of ≥3 months were able to participate in the survey⁶
- Using an 11-point numerical rating scale (0-10), patients self-assessed the level of their pain for the past seven days and were classified as suffering from mild (1,2,3), moderate (4,5,6) or severe (7,8,9,10) CLBP - those who selected 0 (no pain) were screened out
- Patients' self-reported the degree to which CLBP had impacted them physically, psychologically, emotionally and financially⁷
- The Brief Pain Inventory scale assessed severity and interference of pain⁸
- Data were weighted by sample size, CLBP prevalence and pain severity
- Data analysis:
 - Data were available for 8,990 patients⁹ (mean age 52; 45% female)
 - Absolute numbers of respondents shown in all tables; all percentages shown in tables are calculated from weighted data
 - Data were analysed in totality, as well as for all countries individually - in both sets of data analysis patients were grouped by pain severity: mild (n=1301; 10%), moderate (n=4043; 49%), severe (n=3646; 41%)

FIGURE 1: Interference of CLBP on daily activities



Respondents scored on an 11-point scale from 0 to 10, with 0 meaning no interference, and 10 meaning complete interference

FIGURE 2: Emotions of patients with CLBP when completing survey



- Patients with severe CLBP felt more sad, frustrated, anxious, desperate and isolated than patients with mild CLBP
- Patients with severe CLBP felt less calm, hopeful and happy than patients with mild CLBP

RESULTS

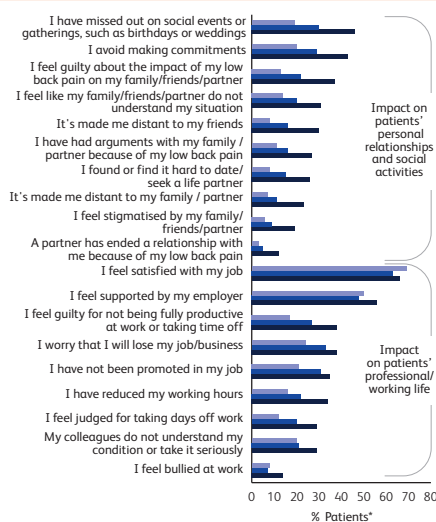
Impact on individual:

- Patients with severe CLBP experienced a substantial level of interference with all activities surveyed (Figure 1)
- Severe CLBP is associated with higher negative emotions and lower positive emotions (Figure 2)
- Patients with severe CLBP experienced more impact in their personal lives than those with mild CLBP (Figure 3)

Financial impact and impact on working life

- About a third of patients with severe CLBP, who were in the workforce, reduced their working hours or worried that they would lose their job/business (Figure 3)
- Patients with severe CLBP miss more days of work on average per month than patients with mild CLBP (Table 1)

FIGURE 3: Impact of CLBP on patients' personal relationships, social activities and professional/working life



- *who strongly agreed/somewhat agreed to the statements listed
- Patients with severe CLBP agreed that they had missed out on social events or gatherings, such as birthdays or weddings, due to their CLBP, and that their pain had made them distant towards their family/partner and friends
- Regardless of pain severity, the majority of all working patients with CLBP felt satisfied with their job and supported by their employer

TABLE 1: Days of work missed per month due to CLBP

	Mild n=1301	Moderate n=4043	Severe n=3646
Mean days of work missed per month	3.7	4.1	5.2

TABLE 2: Impact of CLBP on patients' financial responsibilities

	Mild n=1301	Moderate n=4043	Severe n=3646
My low back pain has not caused me to worry about any of the below %	78	71	59
My low back pain has caused me to worry about ≥ 1 of the below* %			
Paying rent or mortgage	6	9	12
Paying utility bills e.g. gas, electricity	7	11	17
Paying for food	7	11	15
Paying for other regular expenses e.g. phone, car	8	11	16
Paying for unexpected costs e.g. home repairs	11	15	21
Financially supporting my partner / family / children	10	14	19

*Patients were able to select multiple answers

- Patients with severe CLBP were more worried about financial responsibilities than those with mild CLBP

TABLE 3: Impact of CLBP on patients' income

	Mild n=1301	Moderate n=4043	Severe n=3646
My income has not reduced %	82	76	66
My income has reduced by* %			
less than 10%	5	6	8
10%-25%	5	7	10
26%-50%	5	5	9
51%-75%	2	2	4
more than 76%	2	3	4

*Patients were only able to select one of the below answer options

- A third of patients with severe CLBP stated that their income had reduced due to their condition

Limitations:

- Survey participation was limited to those who have access to the internet and who actively volunteer to participate in market research studies
- The data may not be representative of the entire CLBP population
- The survey required patients to recollect and self-report their experiences which can be subject to recall bias
- Differences between pain severity groups must be considered within the context of descriptive and inferential statistical analysis

CONCLUSIONS

- CLBP is associated with concern around financial responsibilities, worsening of patients' emotional wellbeing and ability to work
- It is important for the clinical community to consider the impact CLBP has across all aspects of patients' lives, and the need to provide adequate multidisciplinary healthcare resources to manage patients comprehensively

REFERENCES

- Rudy T, et al. *Pain*, 131(3), 293-301, 2018.
- Melloh M, et al. *Musculoskeletal Disorders*, 9(81), 2008.
- Mendonca L, et al. *Systematic Reviews*, 7(149), 2018.
- Duenas M, et al. *Journal of Pain Research*, 9(1), 457-467, 2016.
- Van Griensven J, et al. *Methodology to Assess Impact and Burden of Chronic Low Back Pain on Patients' Physical and Emotional Health – Global Survey of >9,000 Patients Across 16 Countries (Abstract A-1021-0062-00536)*. European Pain Federation EFIC congress, 6 September 2019, poster viewing session 3 at 12:30-13:30.
- Keller S, et al. *Clinical Journal of Pain*, 20(5), 309-318, 2004.

DISCLOSURES

The Citizens' Research project was funded by Pfizer Inc. and Eli Lilly and Company. CB, LA: employees and shareholders of Pfizer Inc. SW: employee and shareholder of Eli Lilly and Company. CC: employee of IPSOS. JG, SL, BF: received financial compensation for consultancy activities from Pfizer Inc. and Eli Lilly and Company. All authors have made substantial contribution to conception and design of the survey, or analysis or interpretation of the survey data

ACKNOWLEDGMENTS

This market research survey was funded by Pfizer Inc. and Eli Lilly and Company with support from IPSOS and 90TEN. The authors had full editorial control of the poster and approved all content