

# Complex Regional Pain Syndrome: An international survey of clinical practice

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## Aim of Investigation

- Complex Regional Pain Syndrome (CRPS) is a highly distressing, persistent pain condition that occurs predominantly in a limb.
- Currently there is no definition of existing care. Establishing what this looks like internationally will help inform future patient and health professional service delivery, education initiatives, and content of clinical guidelines.
- International guidelines<sup>1,2,3</sup> promote best practice in CRPS treatment and management however, recommendations are not always applied in clinical practice.
- Specifically, we wished to understand how care was being provided, including the aims of treatment, and the barriers and facilitators which may impact on achieving these objectives.

## Methods

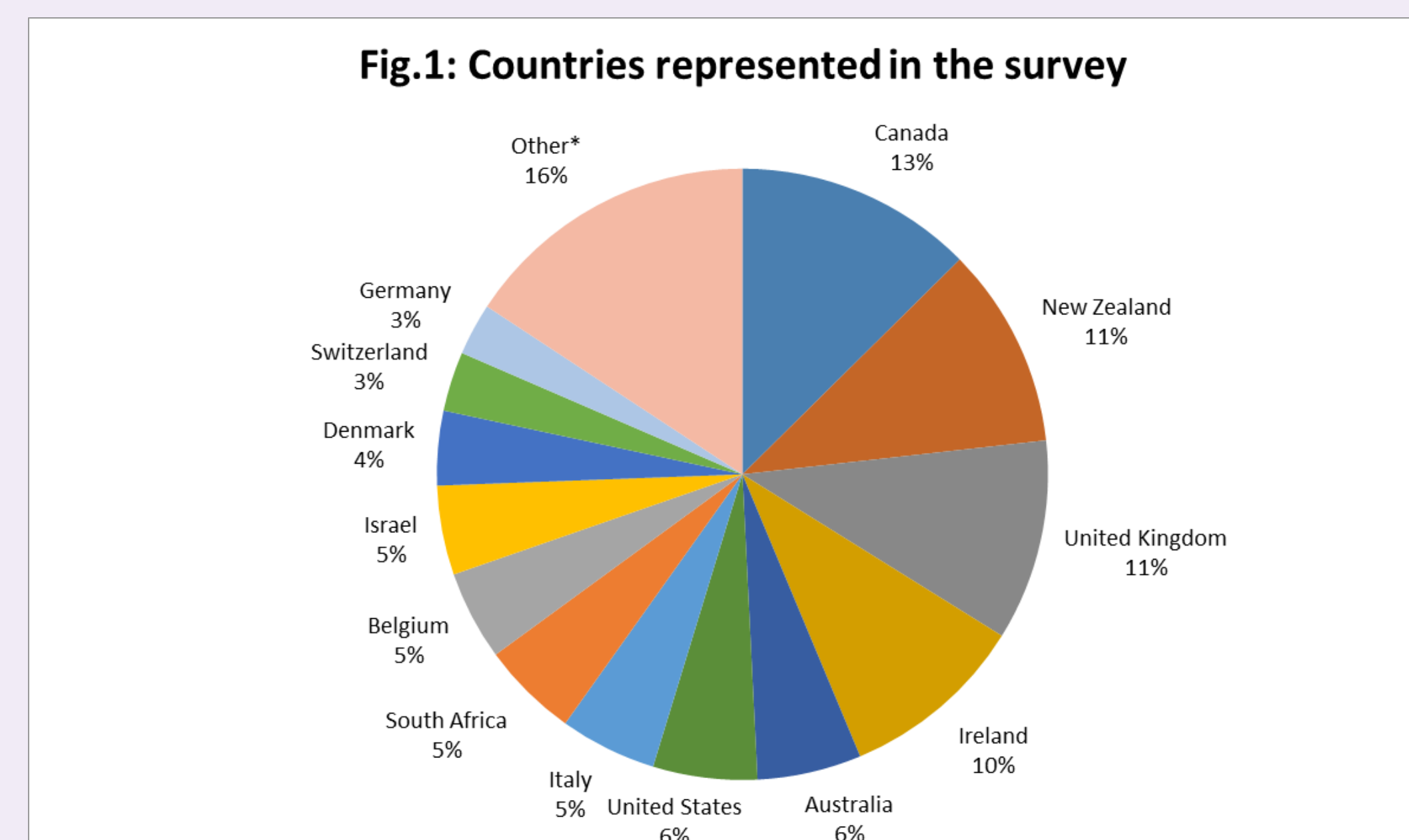
- An online survey was created using the Qualtrics Platform.
- Health professionals and researchers were recruited from an international population via the International Association for the Study of Pain (IASP) Special Interest Group for CRPS, country specific Pain Societies and health professional organisations.
- The survey was open through September and October 2016.
- Twenty-one quantitative questions identified respondent characteristics, experience and local provision of care. Data were analysed using frequency counts and percentages.
- Thematic analysis identified the patterns arising from five qualitative questions; asking respondents for their treatment aims and experience in achieving these.
- Participants were required to indicate their consent prior to being able to view the questionnaire. Responses were anonymous.

Ethical approval was granted by the University of the West of England, Bristol, UK.

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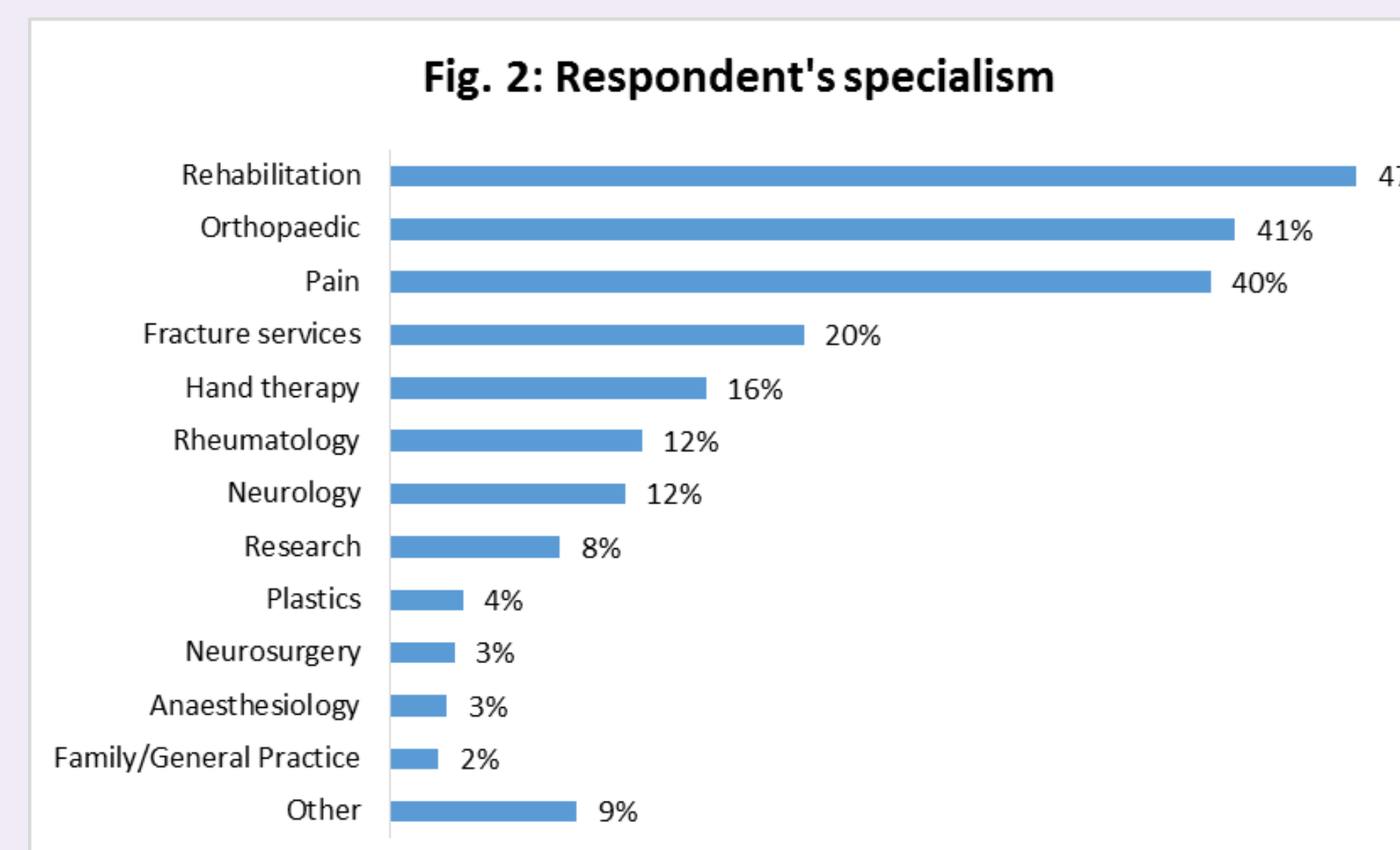
## Results

- Responses were received from 271 health professionals or researchers working in 37 countries (Figure 1).



\*Argentina, Bolivia, Brazil, Chile, China, Colombia, France, Guatemala, India, Japan, Jersey, Kenya, Mexico, Netherlands, Nigeria, Northern Ireland, Norway, Senegal, South Korea, Sweden, Taiwan, Thailand, Uruguay, Venezuela.

- The majority were clinicians providing patient care (77%) and many worked in more than one specialism (Figure 2).



- 48% of respondents reported seeing ≤5 patients with CRPS in the previous 12 months.
- 50% of respondents expressed difficulty in recognising the symptoms of CRPS.

<sup>1</sup>Goebel A, Barker CH, Turner-Stokes L et al. (2018) Complex regional pain syndrome in adults: UK guidelines for diagnosis, referral and management in primary and secondary care. London: RCP <sup>2</sup>Harden et al. (2013). Complex regional pain syndrome: practical diagnostic and treatment guidelines, 4th edition. Pain Medicine 14(2), 180-229; <sup>3</sup>Perez RSGM, Geertzen JHB, Dijkstra PU et al. (2014) Updated guidelines: complex regional pain syndrome type I. Netherlands Society of Anaesthesiologists/Netherlands. Society of Rehabilitation Specialists.

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- At the first consultation, 90% of respondents reported that, on average, their patients' signs and symptoms had been present for ≤12 months.
- Treatment aims were in line with published guidelines however lack of resources and fragmented care were reported as barriers to early intervention.
- Five themes emerged from the qualitative data (Figure 3).

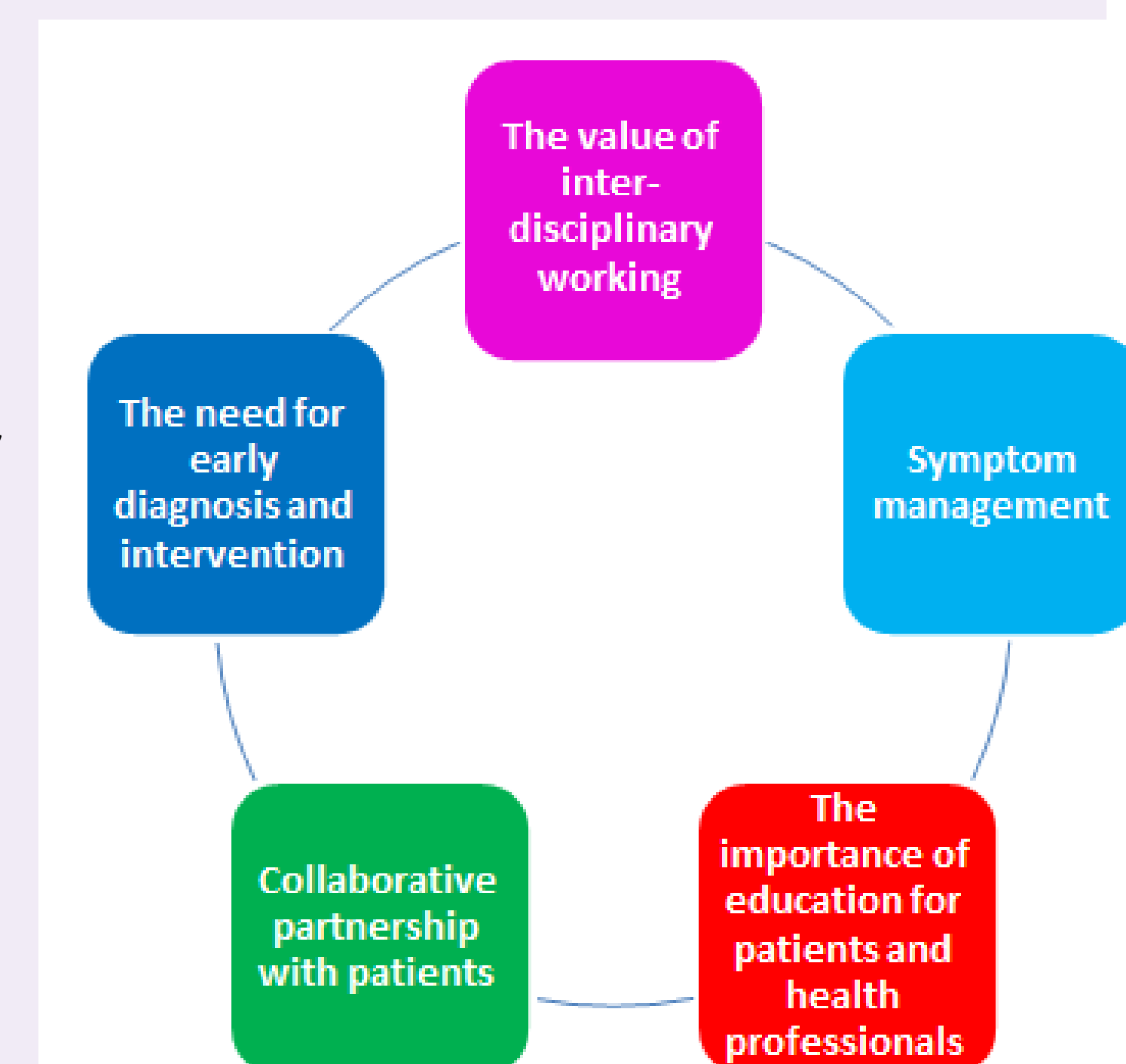


Fig.3: Themes

## Conclusions

- This international survey provided new insights into routine CRPS practice across the globe.
- Inter-disciplinary working supported the attainment of treatment aims. Opportunities to engage with colleagues across disciplines and build networks outside of the immediate clinical environment, should be facilitated. This is particularly important for those practitioners who see patients with CRPS infrequently.
- Increased awareness and recognition of CRPS signs and symptoms by health professionals may be addressed by improved educational resources and access to professional networks which signpost best-practice guidelines.
- Although the patients seen by our respondents were, on average, assessed early in their CRPS, the reported delays in diagnosis, treatment and appropriate referral, need to be addressed by streamlining services and developing clear care pathways.
- Ongoing development of CRPS standards of care will undoubtedly support improved clinical effectiveness.