



## Irish Clinicians' Knowledge and Confidence in Diagnosing, Risk Factors and Prognosis of Patellofemoral Pain

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### Introduction

**Patellofemoral Pain (PFP)** is pain around or behind the patella, aggravated by movements that load the patellofemoral joint during weight bearing on a flexed knee.<sup>1</sup>

PFP is a **common chronic knee condition** affecting all population subgroups.<sup>2,3</sup>

- Adolescents
- Adults <60 years old.
- Physically active

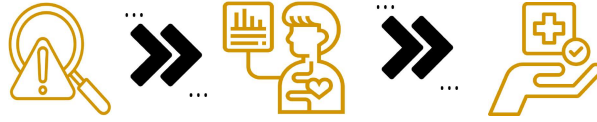
**Diagnosis of PFP is ambiguous and challenging** – no definitive clinical test.<sup>7</sup>

Diagnosis made through **clinical examination** – focus on individuals' history, identifying risk factors & symptoms

**Risk factors** are numerous, but the relationship between risk factors and the development of PFP is **conflicting** – PFP's multifactorial complexity.<sup>6,8</sup>

The **outcomes** of PFP are unfavourable.  
• >50% of individuals with PFP had negative outcomes 5-8 years post-diagnosis.<sup>4</sup>

**No published research** evaluating Irish Clinicians' beliefs and knowledge of PFP.



### Aims

**Evaluation of Irish Clinicians' Knowledge and Confidence in Diagnosing, Risk Factors and Prognosis of Patellofemoral Pain**



**Comparison of Irish Clinicians' Knowledge and Beliefs of PFP with Current Practice Guidelines (CPG), Other Clinicians' & Literature**

### Discussions & Implications

Clinicians were confident in their approach to PFP – on par with international standards.

Irish Clinicians feel their approach is current & aligns with PFP.

Clinicians' knowledge of diagnosis aligned with CPG & international standards.

Irish Clinicians are well-versed in CPG, the identification & diagnosis of PFP.

Risk factor knowledge was similar to international standards but did not align with CPG.

Risk factor knowledge is a problematic area for Clinicians in general, implying issues in translating CPG.

Prognosis knowledge was mixed and did not align with CPG or international standards.

Prognosis knowledge is another problematic area gap implying issues in translating CPG to Clinicians' beliefs.

The time it takes to translate evidence into Clinicians' beliefs is a known issue.<sup>5</sup>

Conflicting CPG, position statements & literature on PFP.<sup>9</sup>

### Prognosis

Clinicians were evenly split in agreement on prognostic items.

**Most Agreeable**

**Least Agreeable**

Shorter symptom duration (12 months) is associated. PFP had unfavourable recovery with better outcomes. More than half of patients with post 5-8 years of diagnosis.

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### Results

Characteristics	Value, NO (%)
Age	47 +/- 9.9
Sex	
Male	24 (45.3)
Female	29 (54.7)
Discipline	
Physiotherapist	45 (84.9)
Athletic Therapist	8 (15.1)
Governing Body	
CORU	31 (58.5)
MISCP	1 (1.9)
ISCP	31 (58.5)
ARTI	8 (15.1)
BASRAT	1 (1.9)
Clinically Practice within Ireland	
Yes	52 (98.1)
No	1 (1.9)
Years of Experience	
< 5	10 (19.2)
6 - 10	4 (7.7)
11 - 15	6 (11.5)
16 - 20	10 (19.2)
> 21	22 (42.3)
Previous Experience of PFP	
Yes	52 (100)
No	0 (0)
Currently treating an individual with PFP	
Yes	34 (65.4)
No	18 (34.6)

**Confidence**  
The majority of Clinicians were confident in their approach to PFP. 93%  
8% of Irish Clinicians were not confident that their approach aligned with PFP – All Clinicians were physiotherapists

**Diagnosis**  
The majority of Clinicians agreed with the criteria to diagnose PFP. 88%  
71% disagreed with the use of imaging & the association between Knee Crepitus & Pain & Function. – Significantly more physiotherapists disagreed than Athletic Therapists (p=0.04).

**Risk Factors**  
The majority of Clinicians agreed with the majority of risk factors. 60%  
Most Agreeable: Age 34%, Quadriceps weakness 90%, Flexibility 42%, Decreased Flexibility

**Confidence**  
93% of Irish Clinicians were confident in their approach to PFP.

**Diagnosis**  
88% of Clinicians agreed with the criteria to diagnose PFP.

**Risk Factors**  
60% of Clinicians agreed with the majority of risk factors.

**Prognosis**  
54% split in agreement on prognostic items.

### Methods

**Study Design:** Cross-Sectional online survey.

**Survey** 7-page 35-question Survey adapted from 8. Mix of Likert-based (n=23) and yes/no questions (n=3).

- 3 Sections:
1. Participant Demographics.
  2. Confidence in the approach and management of PFP.
  3. Knowledge of PFP – Diagnosis, Risk Factors, Prognosis.

**Participants** Irish Clinicians (Certified and practices within Ireland):  
• Chartered Physiotherapists  
• Certified Athletic Therapists

**Statistical Analysis**  
Cronbach's Alpha – Survey Validity.  
Spearman's rank correlation – associations:  
a) Discipline  
b) Years of experience  
c) Clinicians' previous experience with PFP.  
d) Years of previous experience with PFP.  
e) Clinicians currently treating individuals with PFP.  
Pearson's chi-square test – Any differences in observed response between disciplines.

**Limitations**  
Small sample size (n=53) – Generalisation of results.  
No consideration if clinicians had a special interest in PFP – selection bias  
Beliefs and knowledge of confidence may not align with the day-to-day approach to managing PFP.  
Surveys can identify gaps in knowledge but not CPG.<sup>10</sup> Clinicians can not accurately self-assess.<sup>2</sup>

### Further Studies

Build on the established knowledge gaps  
Identify barriers in translating current evidence to current practice and clinicians' beliefs.  
Clarify CPG, Position Statements and Literature on PFP

