

PLENARIES

PLENARY 5: Scientific Writing in Physiotherapy: Turning Clinical Practice into Evidence

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Physiotherapists generate substantial clinical information through routine assessment, intervention, outcome measurement, and patient follow-up. However, valuable clinical experience and routinely collected data often remain undocumented or underutilised as sources of evidence. Scientific writing provides an essential bridge between clinical practice and evidence-based physiotherapy by transforming clinical observations and systematically collected data into transparent, reproducible, and clinically meaningful knowledge.

The development of clinically relevant research begins with recognising recurring clinical problems and translating them into focused research questions. For hospital-based physiotherapists, pragmatic study designs such as case reports, case series, and retrospective studies provide feasible approaches for generating evidence within routine clinical settings. Case reports and case series can document unusual clinical presentations, novel interventions, feasibility, safety considerations, and emerging outcome patterns, while generating hypotheses for subsequent research. Retrospective studies using existing clinical records can investigate prevalence, associations, predictors, treatment outcomes, and service-related outcomes when relevant variables and outcomes are clearly defined.

The credibility of clinical research is fundamentally dependent on the quality of the underlying data. Standardised assessment procedures, operational definitions, structured documentation, consistent measurement time points, reliability assessment, appropriate management of missing data, and systematic data-quality auditing are therefore essential components of robust clinical research.

The IMRaD structure and established reporting guidelines, including CARE for case reports and STROBE for observational studies, provide frameworks for transparent and reproducible scientific reporting. Strengthening scientific writing and clinical documentation empowers physiotherapists to transform routine patient encounters into credible evidence, enhance clinical decision-making, support evidence-based practice, and contribute to the advancement of physiotherapy knowledge and professional practice.