

## Reflections on the career of Janet Carr - a physiotherapy trailblazer

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Upon the death of Janet Carr in 2014 – one of the profession's leading lights with a life-long passion for advancing physiotherapy – it is timely to reflect not only on her life and contribution, but also on our profession's origins, directions and future.

In the last 50 years, the period in which Janet treated, taught, thought and wrote, the physiotherapy profession has faced significant challenges, resulting in unprecedented changes in our professional role. In particular, these years encompass the period when physiotherapists developed independence both in reasoning and professional practice. For the first time, physiotherapists were developing career paths in scholarship and learning as well as in the clinic. Entry programs were increasingly located in universities, such that academic pathways became possible, leading to the growth of higher degrees and research within the profession. The move from hospital-based to university-based education coincided with a shift in the profession towards scientific rigour. There was strong recognition of the importance of deriving clinical implications from the literature, particularly the related sciences, and of conducting research on human function. In addition, there was a rapid development of interventions based on a wider and sounder theoretical basis, the development of reliable measurement tools and the vigorous testing of outcomes.

Janet Carr, along with her close colleague Roberta Shepherd, has been at the forefront of many of these changes over the decades. The drive for change in the conceptual basis for professional practice is particularly evident in their scholarly work and academic leadership. This scholarship is evidenced in the progression of their writing over time which is mirrored in the scientific evolution of our profession. A marker of the early stage of their influence was the publication in 1980 of their first internationally available textbook - *Physiotherapy in Disorders of the Brain* – a book that was specifically published to clarify the changing role of physiotherapy in the treatment of adults with brain damage. Unlike previous physiotherapy texts, this book was extensively referenced to support their arguments, a feature that was particularly unusual at that time. By providing detailed reference lists, and giving, where possible, reasons for the treatments described, they provided a basis for further investigation into treatment effectiveness. The three main themes of this early text illustrates the beginning of the paradigm shift towards the need for a problem-oriented approach to assessment and treatment, the need for an understanding of the processes involved in motor skill relearning and the need to understand the pathological and psychological reasons underlying problem.

The next textbook, *The Motor Relearning Programme for Stroke*, published in 1982 also illustrates the change from inductive thinking to scientific rigour. In it, Janet and Roberta wrote: "We

are aware of the need to research thoroughly the effectiveness of any new developments in physiotherapy, particularly since the therapeutic measures at present employed in stroke rehabilitation are carried out despite there having been little or no investigation of their effectiveness". They emphasized the need to describe physiotherapy intervention in detail and to develop tools to measure outcomes so that the effect of intervention could be tested. These ideas, which are taken for granted now, were in advance of the time.

By 1998, in their text *Neurological Rehabilitation: Optimizing Motor Performance*, Janet and Roberta were aiming to: "assist clinicians to become more informed and effective practitioners and to stimulate clinical and laboratory research which will in turn lead to dynamic and effective methodologies. Throughout the book, we have provided references in order to illustrate the process of utilizing theoretical and data-based information in clinical practice. Where these are available, we have included reference to outcomes studies because it is such evidence-based material which is a powerful determinant of theory and direction, enabling the development and testing of protocols (or strictly observed guidelines) as a means of establishing best practice." This quote illustrates that the profession had by then advanced to the stage of testing interventions, and coincides with the exponential increase in randomized controlled trials in physiotherapy (<http://www.pedro.org.au/english/downloads/pedro-statistics/> accessed 3<sup>rd</sup> February 2015).

In the preface of the second edition of *Neurological Rehabilitation: Optimizing Motor Performance*, published in 2010, Janet and Roberta reflect on the progress of the profession and their optimism for the future. "Physiotherapists are making a major change away from methodologies developed in an earlier time for which there is no evidenciary support, and increasingly using methods that are congruent with current knowledge and for which there is encouraging evidence. The results of suitably rigorous clinical trials eventually contribute to evidence-based practice. The current interest in rehabilitation research and the quality of that research are grounds for optimism."

Janet felt that bridging the gap between science and practice was an overwhelming task for the clinician and was therefore a critical driver in writing textbooks throughout her career. Collaboratively with Roberta, Janet authored/edited 13 books from 1976 to 2010 which have inspired generations of physiotherapists. These books have been translated into most European languages and many Asian languages including



Korean, Chinese, Japanese, Arabic and Farsi. The books stimulated passionate debate and the development of ideas within the broad physiotherapy community, and between physiotherapy and other professions. To engage in this debate, Janet travelled, collaborated with international scientists, taught and presented conference papers in over 30 different countries. Janet and Roberta worked, discussed, argued and conducted their own research and scholarly work, while encouraging and mentoring young researchers and clinicians. Although Janet's major contribution was in neurological rehabilitation, the way she conceptualised the profession and moved it forward applied to other areas of rehabilitation. The breadth of her influence and mentorship is exemplified by the Foundations for Physiotherapy Practice Series, commissioned by Janet and Roberta, and published in the early 1990's: *Key Issues in Cardiopulmonary Physiotherapy* edited by Elizabeth Ellis and Jenny Alison; *Key Issues in Musculoskeletal Physiotherapy* edited by Jack Crosbie and Jenny McConnell; and *Key Issues in Neurological Physiotherapy* edited by Louise Ada and Colleen Canning. The editors of each of these volumes were, at the time, all Janet's junior colleagues who were inspired by her mentorship and guidance.

It is important for us to acknowledge our debt to those who inspire and lead us. Janet will be remembered as a tirelessly inquiring academic who was a trailblazer, and her legacy will be a lasting one. She cared about patients' outcomes before patient-centred care was articulated. Her contribution was ahead of its time in that it was in line with the contemporary view of healthcare systems which are now best conceptualized as learning systems where healthcare delivery, education and research coexist to improve patient outcomes at individual and societal levels. Janet entered the physiotherapy profession in 1954, at a time when the average working life of a physiotherapist was 5 years, and went on to devote close to 60 highly productive years to her profession. Janet never retired – until her death she held an honorary position of Associate Professor in the Faculty of Health Sciences, The University of Sydney. On hearing of Janet's illness, the physiotherapy staff at the University sent Janet flowers and promptly received a response from Janet: "I have fond memories of working at the School of Physiotherapy, The University of Sydney in its golden years – we thought we could change the world". Janet did change the world, she made it a better place, and she will be greatly missed. She inspired and empowered generations of physiotherapists.

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