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Introduction

Heather D'Cruz, Struan Jacobs and Adrian Schoo

In most countries there is a trend for government departments and funding agencies to favour interprofessional (or multidisciplinary) models of care. The intention underlying this trend is to provide a holistic approach to understanding service users' problems and needs, which are usually multifaceted and multi-causal, and which therefore may benefit from multidisciplinary knowledge. Examples include services to prevent and intervene in cases of elder abuse (National Committee for the Prevention of Elder Abuse); cancer research (Cancer Research, UK); acute healthcare (Atwal and Caldwell 2006); psychiatric services (Salmon 1994); and palliative care (Corner 2003). However, while many health and human service organizations recognize the desirability of multidisciplinary teams, primarily to promote coordinated services, to minimize problems of 'gaps' in services to clients and problems of service duplication and waste of resources (e.g. the National Committee for Prevention of Elder Abuse, Cancer Research, UK), there is less appreciation of how such interprofessional relationships work in practice with actual service users and their particular needs and problems. These largely unrecognized, yet complex, features of interdisciplinary group dynamics that go beyond 'teamwork' have been critiqued based on personal experience by individual professionals (e.g. Salmon 1994), as well as those seeking to develop organizational and professional practice (e.g. Corner 2003, van Norman 1998, Davis 1997). To achieve such an appreciation, it would be essential to understand both the differences and similarities between professions, rather than taking for granted that professional goodwill alone will achieve desired outcomes for service users. Furthermore, while each professional education programme aims to inculcate graduates into prescribed ways of knowing and doing as representative of that profession, demarcated from 'other' professions, individual practitioners may not strictly adhere to professional prescriptions for a variety of reasons, including personal beliefs and values, exposure to alternative knowledge and value bases, and the particular demands of

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practice (Davis 1997). Thus while interprofessional practice as an abstraction is a laudable aim, there are also contextual issues that need to be understood so that the strengths of such practice can be maximized, while attending to the features that may limit its effectiveness. This book begins to address some of these underlying features of professional practice, for example, different professional knowledge bases and different organizational roles and responsibilities. The title *Knowledge-in-Practice in the Caring Professions: Multidisciplinary Perspectives*, refers to two themes.

The first theme, related to knowledge-in-practice in the caring professions, explores a common preoccupation for all professions, that of the complicated relationship between 'knowledge' and 'practice', which involves at least four strands. The first strand is that 'practice' may be informed by or apply 'knowledge' (hence talk of applied science and applied social science [Beck 1959: 18]). A second strand is that 'knowledge' as theoretical abstractions must be negotiated and translated 'in practice' with actual people in their life circumstances (Benner 2004). A third strand is that 'knowledge' exists in 'the practice', sometimes described as 'practice wisdom'. Finally, practice may give rise to new knowledge and understanding (Diwan et al. 1997). Moreover, as an accredited and accomplished agent, each professional is expected to work autonomously, even if he or she is engaged in a multidisciplinary team.

The aim of this book is to seek for answers to related questions. How do professionals understand knowledge that they apply to, or that is incorporated in, their practice? What does it mean to talk of knowledge-in-practice? How do professionals, engaged in problem-solving activities with or on behalf of service users, 'know how' to exercise skill, judgement, discernment and discretion? And, how do they apply theory in practice, in a variety of contexts? How much of their knowledge is akin to that in 'craft traditions' in which procedures, maxims and rules have been found useful in the past and have been handed down from accredited practitioners to the younger generation? Is this knowledge, of which practitioners themselves may not be fully aware, systematically interconnected, or is it weak in structure (see Nash 1963: 63–4)? Encapsulating these questions, this book explores the important but insufficiently understood topic of professional knowledge expressed in and through practice as involving agents exercising their judgement and discretion, which is embodied in their skilled activities.

The book's second thematic strand – a counterpoint to the first – involves recognizing and acknowledging differences between and within professions. The idea of difference underpins most discussions of professional perspectives and practice approaches, even when professionals may be working in the same field of practice, for example, child and family welfare, or mental health.

The most salient differences between professions relate to the substantive disciplines and knowledge informing professional education. These disciplines are, broadly, the natural sciences (including biology) and the social sciences (including the humanities). Further differences include concepts, theories and practices that are peculiar to a profession; the extent to which professionals use technology as part of their helping repertoire; and the degree of visibility afforded to the interventions offered, for example through medication or testing, as opposed to counselling or 'talk' therapies. Differences between professions may also relate to the rigour with which their claims about the efficacy of interventions – problem, intervention, outcome – can be assessed empirically. Thus differences between professions may also relate to the claims that can be made for the efficacy of interventions that depend on the ability to make correlations or see causal relationships between problem, intervention and outcome. The ability of some professions to claim greater efficacy for their interventions may be both a cause and an effect of increasing demands for 'evidence-based practice', which tend to rely only or primarily on 'evidence' that has been produced through experimental science models that include random control trials. The increasing tendency to gauge professional efficacy according to the principles of experimental science models has generated significant professional and scholarly debate about what is to count as evidence, and how different forms of 'evidence' are to be graded in different research and practice paradigms (Roberts et al. 2004). The ethical and political issues, not to mention funding allocations, that arise from particular understandings of efficacious practice can pose considerable difficulties for professions that do not or cannot work in such ways in performing their helping role, or practitioners within professions who may find just one model of knowledge and practice extremely limiting in understanding and responding to clients' needs and problems (Camilleri 1999, Bainbridge 1999, Powell 2001). Thus, in addition to differences between professions, we also consider differences within each profession: that is, despite professional education and accreditation of practitioners, no profession can claim to work from a single perspective because different client groups, fields of practice and organizational contexts affect their practice. We also recognize that professions change over time and place and may seek to include new responses to emerging problems that require innovative knowledge, theories and practice approaches (Toulmin 1972).

It can be argued that scholars have addressed these aspects of knowledge-in-practice in the caring professions, either practitioners within one profession, for example, social work (Fook 1996, Fook et al. 2000), nursing (Mallik et al. 2004) and physiotherapy (Donaghy and Morss 2000), or from multidisciplinary perspectives, especially in the health professions, for example, physiotherapy, occupational therapy, medicine and nursing (Higgs et al. 2001, 2004). The scholarship indicates important points. First,

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there is the common interest in understanding the translation of formal, abstract knowledge, in daily practice, with and on behalf of service users. Secondly, as a counterpoint to the commonality of discretionary practice, there are differences between professions that have consequences for what 'knowledge' and 'practice' may mean, and how the connections between 'knowledge' and 'practice' are made. Finally, professions are not homogeneous monoliths; contextual and idiosyncratic forms of knowledge-in-practice extend professional boundaries and generate demarcation disputes ('turf wars'), as between obstetricians and midwives (Boxall and Flitcroft 2007); nurses and social workers; clinical psychologists and psychiatrists (Salmon 1994); physiotherapists and orthopaedic surgeons or sports medicine physicians; and occupational therapists and social workers.

We have canvassed the options for adequately addressing these complexities involving similarities and differences between professions especially as they present conceptual and practical problems. Most fundamental is the problem that individuals (for example, educators) and professional groups (for example, accrediting and regulatory bodies) espouse the importance of multidisciplinary practice but tend to focus on the knowledge generated by and about their own profession. Furthermore, entrenched professional paradigms can encourage power struggles over the perceived 'superiority' of some disciplinary paradigms over others, including disagreements about epistemology and its relationship to problem definition, interventions and team members' roles (Davis 1997). Perceived epistemological differences between, and hierarchies involving, 'different ways of knowing' can lead to inequalities between team members and their contributions to team decision-making processes and outcomes (Salmon 1994, Davis 1997, Corner 2003). Additionally, van Norman (1998) identifies the ethical and legal issues of professional authority and responsibility that team decision making may not address when individuals may be held ethically and legally liable as 'team leaders'.

These factors serve to underscore a practical problem that attends a text that has chapters by different professionals / academics. There are those who would reject the text as unmarketable, because professionals and educators will only read the chapter(s) 'relevant to their profession'. We view this practical problem as being closely connected to the conceptual problem for moving beyond the position of mere *multidisciplinarity* (the existence of a range of professions whose 'members work in parallel or sequentially from a specific disciplinary base to address a common problem' (Rosenfield 1992, in Corner 2003: 11, Soklaridis et al. 2007). The very fact that different disciplines are represented within one organization and may even practice under the same roof does not necessarily mean they are able to achieve *interdisciplinarity* ('working jointly but still from a disciplinary base to address a common problem') or the more desirable, *transdisciplinarity*, where

there is a shared conceptual framework, drawing together disciplinary-specific theories, concepts and approaches to address a common problem (Rosenfield 1992, in Corner 2003: 11). In many cases, professionals may even accept (transdisciplinary) task substitution between disciplines as a means of working more efficiently and effectively (Kessel and Rosenfield 2008).

As one way of exploring knowledge-in-practice, we might have invited representatives of a single profession to contribute their ideas on the topic. This approach appealed in that we expected it would be relatively easy to coordinate. We rejected it, however, on the grounds that rather than cross disciplinary boundaries – the aim we envisaged for the book – it would only serve to confine analysis within a profession and solidify demarcations between professions. The stance we have taken has been to foster multidisciplinary perspectives for the potential enrichment of professional knowledge and practice. This made it reasonable to ask representatives of different professions to each contribute their interpretation of what knowledge-in-practice means to them. Our approach is not designed to produce definitive, all-encompassing claims about multidisciplinary knowledge-in-practice, but we are confident that it will offer fresh insights into these differences and stimulate discussion that can only be beneficial for scholarly engagement and professional practice. Just such an approach has been enthusiastically proposed by Davis (1997) writing about interdisciplinary curriculum development and teaching.

The challenge for interdisciplinarity that our approach foregrounds is how to encourage an audience of professional educators and practitioners to read chapters other than those that relate to their own profession. Problems of interdisciplinarity in understanding and in practice are evident in the very structure and approach of our book. Transcending differences between disciplines and professions to improve professional practice is an ongoing project (Corner 2003). One is reminded of the debate concerning science's incommensurable theories, methods and classes of objects (ontologies) in, and out of, the physical sciences to which Kuhn drew attention in his *Structure of Scientific Revolutions* (1962) and Feyerabend in *Against Method* (1975) (Harris 2005). Readers of this book will find that it foregrounds professional, organizational and practical imperatives that justify the continued development of cross-professional and cross-disciplinary knowledge and justify the improvement of professional education and practice in multidisciplinary settings.

Complementing existing texts, the book casts light on how expertise is understood differently between (and within) various disciplines and professions.

The book rests on sociological assumptions, among the more important of which are that knowledge is, in a significant sense, socially constructed; social interaction involves interpretive processes; and between knowledge

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and practice there is an implicit relation, which can be represented as knowledge-in-practice.

In approaching potential authors, we sought scholarly professionals (not necessarily academics) who had an ability to reflect on aspects of professional practice. We did not prescribe a particular approach to authors in regard to the topic of knowledge-in-practice. Nor did we expect to establish that the same issues pervade knowledge-in-practice in each caring profession. We asked each author to write on the topic from his or her particular professional perspective. Each author has been encouraged to stand back from his or her practice to reflect on and analyze that practice. Authors were invited to give an account of the knowledge that they take to be embodied in their professional practice, paying particular attention to what is distinctive about practical knowledge and the problems to which that knowledge is applied in their field. Emphasis, it was suggested, should be given to *practical* over theoretical knowledge ('knowing *how*' over 'knowing *that*', according to the distinction as drawn by the philosopher Gilbert Ryle), without in any way excluding the author from providing theoretical insights into that practice. It was expected by the editors that the writing of chapters would vary as to the degree of self-awareness according to authors' personal tastes and interests. Contributors to the book were specifically asked to pitch their discussion at a level accessible to a wide audience, comprising intelligent laypeople, undergraduate students in the arts and the social sciences, and students of and practitioners in the caring professions.

The recognition of professional differences that we have outlined above – differences within and between caring professions – provides an argument for the emergent and non-prescriptive approach we have taken. At the same time, however, the issue of how knowledge-in-practice is understood by members of different professions constitutes the unifying theme and focus of our book. This feature is central to the dialogue between professions. We hope that the insights gained from reading the contributions to this book will illuminate and enhance multidisciplinary and interprofessional practice, with its blurring of professional boundaries. The book contributes a credible alternative to contemporary organizational understandings and expectations of professional practice that tend to minimize professional discretion and the ways in which knowledge-in-practice can contribute to effective practice. In order to address more effectively the range of social, psychological and health problems facing contemporary societies, professionals need to engage in cooperative models of practice. This book will give an additional impetus to that engagement.

In Chapter 1, Struan Jacobs theorizes knowledge-in-practice. He draws from the history of ideas and from philosophy to survey different understandings of relations between knowledge and practice and, more pertinently to the subject of this book, knowledge-in-practice. Particular

attention is paid to the ideas of Michael Polanyi, arguably the most influential of all writers on the subject. Historically, Polanyi explains, agriculture and major industries, including brewing, smelting, tanning, dyeing, weaving and potting, relied upon operatives who possessed considerable skill but had very little formulated knowledge about how to proceed. Craftwork is Polanyi's historical analogy for explaining forms of practice in modern society: doctors making diagnoses, judges reaching verdicts, and – Polanyi's principal interest – scientists conducting research as the primary way of discovering more about reality. The art of science, as envisaged by Polanyi, relies upon scientists conforming to rules that are embodied in their practice. Polanyi argues that scientists assimilate these rules as part of their broad 'practical knowledge' of the art of research, while the practice itself 'cannot be specified in detail'. The knowledge of scientific research is representative of skilled practice in being largely unspecifiable, which excludes the possibility of this knowledge being set down in textbooks and requires that it be learned through an apprenticeship, the apprentice carefully observing his 'master' and endeavouring to emulate the master's 'efforts in the presence of his example'.

Subsequent chapters are by professionals who are practitioners and/or academics in universities involved in professional education. Each of these authors explores the nature and role of knowledge in the practical work of his or her profession, writing from particular professional perspectives, and from their particular interpretation of the overall theme and aims of this book.

Having indicated earlier in this Introduction that 'evidence-based practice' is a common contemporary issue for professionals, with reference to claims about efficacy and effectiveness of practices, it is apposite that Chapter 2, by Peter Greenberg, begins with an account 'of the history and evolution of "evidence-based practice", and its strengths and limitations'. Greenberg's discussion is from his perspective in medicine. Under the title of 'Information, Knowledge and Wisdom in Medical Practice', Greenberg's chapter analyzes different kinds of 'evidence'. Inquiring as to how scientific and other forms of evidence are 'translated into practice', he pays close attention to how medical practitioners deal with 'uncertainty' and to the place of heuristics, diagnosis and practice. Greenberg describes how the uncertainties of medical practice arise in a context, the elements of which include influences on clinical decision making, changing consumers' expectations, 'medicalization' and 'disease mongering'.

A second issue that needs to be addressed in relation to the caring professions is how abstract (theoretical) knowledge is applied in practice where actual problems are presented to professionals by clients. This process, known variously as 'applying theory to practice' (Tuckett 2005), 'clinical decision making' (Hardy and Smith 2008), and professional discretion

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(Baker 2005), is common to all caring professions and must be taught as part of professional education. Chapter 3, by Alex Holmes, considers how the practice of the psychiatrist is largely invisible in the pages of the discipline's textbooks and journals, each trainee gaining mastery by means 'of an arduous clinical apprenticeship' that is augmented by accredited and 'documented' knowledge, the process being overseen and guided by the professional 'guild'.

Another common issue for caring professions discussed above is the importance of the contexts in which abstract knowledge as 'theories' influence and enter practice, for example the organizational context and the field of practice, as well as the particularities of each client's needs and problems (Whiteford and Wright St-Clair 2004). In Chapter 4, 'Social Work Knowledge-in-Practice', Heather D'Cruz explores how she has interpreted social work knowledge-in-practice as research, and the broader implications of such interpretive processes for professional knowledge-in-practice. Chapters 2 to 4 attend to professional issues explored through the particular professional lenses of medicine, psychiatry and social work. The next two chapters consider the connections between personal experiences and professional knowledge-in-practice.

In Chapter 5, 'Disability: A Personal Approach', Lisa Chaffey explores factors involved in the approach that the healthcare worker brings to bear when dealing with clients with disabilities. The approach of the health professional is envisaged by Chaffey as a unique personal blend of thinking in action, described as 'clinical reasoning'. Examining 'the biomedical and social models of disability', she provides an account of the ways in which these models affect the practice of the health professional whose focus is on disability.

In Chapter 6, 'Psychotherapeutic Practice', Joy Norton, a Jungian analyst, looks at strands that exist between professionals' and clients' perspectives on knowledge in psychotherapy. Noting that 'knowledge and clinical practice are always mediated and informed by the experience of the client', Norton identifies a 'process of co-creation unfolding in the work'. Using detailed case material and drawing on three schools of analytical psychology – archetypal, classical and developmental – Norton amplifies the 'moments where practice meets knowledge'. Theory is detrimental to the practice of analysis when it has the determining role. As argued by Norton in regard to her profession, for theoretical knowledge to be of value, it 'needs to emerge in the practice of analysis and not be predetermined by existing, formalized, thinking'.

Chapter 7, 'Knowledge to Action in the Practice of Nursing', Tracey Bucknall and Alison Hutchinson discuss the significance of knowledge utilization in nursing and provide models to describe the knowledge utilization process. They extend their analysis to include what constitutes

evidence for nurses and how nursing knowledge is constructed. Evidence is shown to be integrated and blended with other forms of knowledge (expertise, patient preference and knowledge of available resources) to inform evidence-based clinical decision making in nursing.

The remaining four chapters indicate different approaches to multidisciplinary, interdisciplinary and transdisciplinary knowledge-in-practice. Chapter 8, 'The Risky Business of Birth' is an exploration of the boundaries between obstetricians and midwives, with contested knowledge being considered in relation to caring for pregnant women. The authors, Frances Sheean and Jennifer Cameron, provide an historical survey of the changing institutional boundaries of professional knowledge, roles and responsibilities in the care of pregnant women and trace out implications for professional power and expertise as practice-based knowledge. Risk is a prominent theme in this chapter.

In Chapter 9, 'Skills for Person-Centred Care: Health Professionals Supporting Chronic Condition Prevention and Self-Management', Sharon Lawn and Malcolm Battersby discuss collaborative approaches between providers and consumers of health services for more effectively dealing with 'the growing burden of chronic conditions'. They argue that the problem calls for approaches that circumvent 'traditional turf sensitivities between professionals', and that counteract 'structural boundaries between services'. For Lawn and Battersby, the voice of the consumer, along with 'core skills of engagement and person-centred care', needs to be at the centre of strategies for responding to the challenges posed by chronic illness. 'The focus is on the needs, concerns, beliefs and goals of the person rather than the needs of the systems or professionals.'

Another example of interdisciplinarity and effective professional development is discussed by Megan Smith, Sylvie Meyer, Karen Stagnitti and Adrian Schoo in Chapter 10, 'Knowledge and Reasoning in Practice: An Example from Physiotherapy and Occupational Therapy'. The authors give an account of the knowledge that physiotherapists and occupational therapists use in their clinical practice, and the sources from which that knowledge derives. They discuss knowledge in conjunction with clinical reasoning, reflecting on the intimate relation between knowledge and reasoning in clinical reasoning. The thematic argument of the chapter is illustrated in relation to the care given by physiotherapists and occupational therapists to clients following a stroke. The authors conclude 'that the knowledge and reasoning processes used by these professions include shared and distinctive elements reflecting a close relationship between two professions who maintain defined and separate roles in health practice'.

The final chapter of the book sees Peter Miller explicating the 'truly pan-disciplinary nature' of 'working with alcohol and other drug problems'.

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In Miller's account, the complexities of alcohol and other drug (AOD) problems are shown to require a multidimensional understanding. This is a sphere, according to Miller, in which economic, political, sociological, psychological, physiological, psychopharmacological and neuropsychological considerations generate extensive debates about what constitutes valuable knowledge and about appropriate policy responses. These multidimensional features of essential knowledge for effective practice are seen to be embodied in disputes about who constitutes 'an AOD professional'.

This perusal of the chapters of the book points to three salient features that connect them. The first noticeable feature of the contributions is the *range of professions* represented, in which knowledge-in-practice is a major consideration, from medicine and psychiatry, to analytical psychology, allied health (physiotherapy, occupational therapy, nursing, midwifery) and social work; and to professional care for alcohol and other drug users. Second, the authors represent *diverse fields of practice*, from primary, secondary and tertiary care of physical, mental and emotional health across a range of populations, disability, alcohol and other drug problems, midwifery, and social welfare. Third, the authors interpret the *meaning* of professional knowledge-in-practice in various ways. Some authors (Greenberg, Holmes and D'Cruz) have approached this conceptually, appraising the meanings of 'knowledge', 'practice' and 'knowledge-in-practice' from their professional perspectives. They have done this in ways that have significant resonances for other 'caring' professions. The book includes exploration of connections between the personal and the professional – as in Norton's account of knowledge-in-practice being a process and an outcome. There are studies of actual interprofessional relationships, some of which concern conflict and disputes about the legitimacy of 'practice knowledge' (Sheean and Cameron, Miller), with others involving consensual, effective, interprofessional processes and outcomes in allied health settings (Lawn and Battersby, Smith, Meyer, Stagnitti and Schoo).

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1 Ideas of knowledge in practice

Struan Jacobs

The specialized practice of caring professionals comprises several cognitive dimensions. The most obvious of the dimensions consists in theories, understandings, experiences, facts, advisory rules, stipulations and other such items as have been expressed as *formulated* knowledge, this knowledge serving as a resource from which agents draw in guiding their practice. The concept of formulated knowledge points to a broad distinction between *theory* and *practice*, which has been drawn from the time of ancient Greek philosophy (Lobkowicz 1967). Textbooks are the obvious bearers of formulated knowledge in the training of the professional. Some of the formulated knowledge that she acquired in her professional training may eventually disappear from the practitioner's view, perhaps on account of its having become obsolete, second nature, or having fallen into disuse. Articles in journals and papers at conferences are sources of formulated knowledge with which the professional can supplement her textbook knowledge, inform her practice and keep herself up to date. Theorists have lavished attention over many years on the topic of formulated knowledge and its involvement in professional practice. Relatively little will be said about knowledge of this type in this chapter, one theory being noted to illustrate how such knowledge may come to be produced and used.

The philosopher Karl Popper (1902–1994) advanced a metaphysical theory of three worlds: the physical and the psychological (subjective) – worlds one and two, respectively – and the world of objective products, including language, and knowledge which is formulated in language as affirmations (or denials) of facts and theories and prescriptions of rules and values (Popper 1972: 118).

Complementing his three worlds view, Popper presented a theory the skeleton of which is rendered as PP1→TT→EE→PP2, signifying that the human agent is constantly having to solve problems of one sort or another (for example, technical difficulties, practical issues, explanatory