

DISCUSSION PAPER

Whither Nursing Models? The value of nursing theory in the context of evidence-based practice and multidisciplinary health care

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Abstract

Aim. This paper presents a discussion of the role of nursing models and theory in the modern clinical environment.

Background. Models of nursing have had limited success in bridging the gap between theory and practice.

Data sources. Literature on nursing models and theory since the 1950s, from health and social care databases.

Discussion. Arguments against nursing theory are challenged. In the current context of multidisciplinary services and the doctrine of evidence-based practice, a unique theoretical standpoint comprising the art and science of nursing is more relevant than ever.

Implications for nursing. A theoretical framework should reflect the eclectic, pragmatic practice of nursing.

Conclusion. Nurse educators and practitioners should embrace theory-based practice as well as evidence-based practice.

Keywords: evidence-based practice, nursing models, nursing theory, philosophy

Introduction

The legitimacy of any profession is built on its ability to generate and apply theory. While enjoying a cherished status in society, nursing has struggled to assert itself as a profession. Despite efforts to improve its academic credentials, the discipline lacks esoteric expertise, and while an eclectic pragmatism may serve patients well, failure to articulate a distinct theoretical framework exposes nursing to external control (Macdonald 1995). Aggleton and Chalmers (2000, p. 9) assert: 'Until nurses themselves value the unique contribution that they make to health care and the special body of knowledge that informs their practice, the subordinate role to that undertaken by doctors will continue'. Over

several decades, scholars have attempted to encompass the trinity of physical, psychological and social aspects of care in theories and models of nursing, which were intended to guide practice and provide a platform for training curricula and research, thus supporting the development of professional knowledge.

Misunderstood and misused, the models of nursing that pervaded preregistration training in the 1970s and 1980s failed to bridge the gap between theory and practice. While evidence of successful application has continued to flow in the United States of America (Meleis 2007), where nursing science is supported by substantial funding by federal government and private foundations, nursing models faded from professional discourse in the United Kingdom.

However, it could be argued that the baby was thrown out with the bathwater, and there is now a growing movement to rejuvenate nursing theory (Pridmore *et al.* 2010). The Magnet Recognition Program (American Nurses Credentialing Center 2008) is an international accreditation of excellence in nursing, and a key requirement for organizations is to describe and implement a professional practice model. The author, who is involved in introducing such a model in a large mental health service provider, argues that theoretical development is crucial to the progress of nursing as a caring profession.

Background

Nursing models were identified in the 1950s, as a thinking profession began to emerge from its traditional handmaiden status, with a primary objective to advance from a narrow focus on illness to a broader concern with human needs. The first recognized theory of nursing was by Hildegard Peplau, who was highly influential in reconceptualizing the role from 'doing things to people' to a therapeutic relationship. Illustrating the barriers faced by nurses at the time, Peplau's *Interpersonal Relations in Nursing* was completed in 1948 but not published until 1952 due to lack of medical co-authorship or endorsement (Johnson & Webber 2005). Influenced by the psychodynamic psychiatrist Harry Stack Sullivan and the human motivation theory of Abraham Maslow, Peplau emphasized the nurse (rather than physical treatments and service organization) as the agent of change. Although her expertise was in psychiatric nursing, Peplau described an interactional process relevant to all nurses:

- Orientation – person feels a need and seeks professional help; nurse helps patient understand problem.
- Identification – patient relates to someone who they believe can help.
- Exploitation – patient attempts to make most of helping situation; nurse formulates goals for patient.
- Resolution – patient discards previous goals and accepts new goals, while relinquishing dependence on nurse.

An important step for theorists was to provide a definition of nursing. In the textbook *The Principles and Practice of Nursing* (Harmer & Henderson 1955), Virginia Henderson presented nursing as a response to human functional needs. Equating health with independence, she described 14 fundamental needs: breathing, eating and drinking, eliminating, mobilizing, sleeping and resting, dressing, maintaining body temperature, cleaning and grooming, avoiding injury, communicating and expressing emotions, worshipping, working, playing and learning. Although Henderson and Peplau intended their theories to apply across the spectrum of care

settings, the contrast between the mindsets of general and mental nursing are evident here.

As the theoretical enterprise gained momentum, models diversified, each based on assumptions about human nature and nurture, and extending to the wider socio-environmental context. Systems thinking was prominent in the Adaptation Model of Sister Callista Roy (1980), who described a natural human tendency towards biological, psychological and social equilibrium, with maladaptive responses the target of nursing intervention. Drawing on her scientific education, polymath Rogers (1970) devised a novel theory of the human being as a unitary energy field in dynamic interaction with the environment. Rejecting a Cartesian division of somatic and mental functioning, Rogers propounded holism in its true meaning. Health and illness were reinterpreted as manifestations of the rhythmic fluctuations of life, and the role of the nurse was to decipher each patient's patterns, and to promote synergy with his or her surroundings. Riehl's Interaction Model (1980), based on the symbolic interaction theory of Chicago sociologists, emphasized unique meaning in each situation, with the nurse helping the patient to acquire or adapt roles in response to health changes. Citations in the nursing literature (Allgood 2002) indicated that the most widely used model is that of Orem (1991), which facilitates progress from self-care deficit to independent living skills.

The authorship of nursing theory has reflected the relatively advanced intellectual culture of nursing in the USA. In the fifth edition of *Nursing Theorists and Their Work*, a compendium of nursing models (Marriner-Tomey & Allgood 2002), all but one model was from North America (later editions have wider international representation including the work of Katie Eriksson; Allgood & Marriner-Tomey 2010). The exception was by British nurses Nancy Roper, Winifred Logan and Alison Tierney (1980), who orientated nursing to 12 activities of living: maintaining a safe environment, communicating, breathing, eating and drinking, eliminating, personal cleansing and dressing, controlling body temperature, mobilizing, working and playing, expressing sexuality, sleeping and dying. Similarities with Henderson are clear, but Roper *et al.* explicitly applied the nursing process, with its logical sequence of assessment, planning, implementation and evaluation.

From this brief *resumé*, theorists have attempted in various ways to present a comprehensive, rational and systematic approach to nursing. With a plethora of models and theories, various classifications have been offered; Aggleton and Chalmers (2000), for example, categorize models as developmental, systemic or interactional. Unwittingly, such epistemological discussion has muddied the waters, as illustrated by McKenna and Slevin (2008, p. 109): 'Callista Roy's work was seen as a conceptual framework by Williams, a grand

theory by Kim, an ideology by Beckstrand and as neither a model nor a theory by Webb'. Meleis (2007, p. 40) argued that 'differences are tentative at best, and hair-splitting, unclear and confusing at worst'. Semantic resolution is not attempted here, but the definition of a nursing model by Riehl and Roy (1980, p. 6) may be helpful:

A systematically constructed, scientifically based and logically related set of concepts, which identify the essential components of nursing practice together with the theoretical basis of these concepts and values required for their use by the practitioner.

A hierarchical clarification is provided by Fawcett (2005), ranging from metaparadigms (the most abstract) to empirical indicators (the most concrete). Between these poles, nursing theorists have provided plenty of conceptual models, but not so much at the level of theory, which comprises testable proposition on which may be generated evidence of utility and benefit.

Theorists anticipated that models of nursing would enable practitioners to become more autonomous and accountable in their clinical decisions and organization of care, while boosting the development of nursing as a discipline. So what has gone wrong? Instead of elevating nursing to the sunny uplands of theoretically grounded practice, models have been perceived as unrealistic dogma from the ivory towers, and as diversions from intuitive care; consequently, manuals gather dust on library shelves. Constructing, teaching and applying a theory of nursing is undoubtedly a great challenge, but that is no justification for abandoning the endeavour. Practical application has been hindered by a range of constraints, but all of these may be overcome.

Data sources

This paper was informed by literature on nursing models and theories from the 1950s to date, with material gathered from ISI Web of Knowledge and other health and social care databases. Use of literature was not driven by search strategy but as a qualitative selection of the major contributions to theory and relevant debate.

Discussion

Arguments against nursing models

Various arguments presented against nursing models are scrutinized here.

Nursing eludes definition

Hesook Suzie Kim argues (2000, p. 2) that 'a rigorous and exact delineation of nursing as a role and as a scientific dis-

cipline is necessary specifically when it is used as the conceptual basis for the development of nursing's theoretical knowledge'. Yet despite protracted debate, a consensual statement on the meaning of nursing remains elusive. Without a satisfactory definition, how can a theory of nursing be produced? To accommodate the diversity of practice, the concept of holistic care is often presented as a defining statement. Models devised by writers of general hospital background have been perceived as incompatible with specialties such as mental health (Gournay 1995), and clearly for the patient in acute nephritic pain immediate physical intervention is a priority over attending to existential needs, but to compartmentalize bodily and psychological care would be regressive to a holistic ethos. However, as explained by Clarke (1999), the philosophical idea of holism tends to be misunderstood by nurses as an eclectic approach, when it really means integration of *soma* and *psyche*. The medical model and positivism are often the straw men of nursing literature, but medicine too considers the patient in context, as in the biopsychosocial model espoused by psychiatry. Holistic care should be central to nursing theory, but is insufficient as a *raison d'être*. Theoretical development is a step forward from vague ideals of the nursing mission to more clearly demarcated scope, purpose and method, but this is an iterative process whereby theory informs practice and vice versa. Similarly, we should not expect a static definition of nursing.

Lack of prescription for practice

As a vehicle for nursing theory, a model should comprise clear concepts, processes and goals. Difficulty in utilization of nursing models was possibly exacerbated by terminology such as Newman's 'expanding consciousness' (1994) and the 'dynamic energy fields' of Rogers (1970), which deviate from contemporary nursing discourse. However cogent a theory, it is soon redundant if it does not make sense to the practitioner. Yet theorists spent years refining their models to make the unavoidable theoretical complexity readily comprehensible for everyday application. The problem was not only an intellectually lukewarm attitude that theory belongs to academe, but also a tendency for task orientation in practice, leading to the original spirit of a nursing model being lost. In a previous paper, the author (1992) described his training experience with the Roper-Logan-Tierney Model, which was presented in readily accessible terms. The nursing school and general hospital had pursued integration of teaching and practice by instilling this model throughout clinical settings, but in reality the system deteriorated into a ritualistic documentary procedure mostly performed by students as a learning exercise. The apparent strength of the model as a

straightforward implementation of the nursing process made it prone to compartmentalized, concrete thinking. Roper-Logan-Tierney was set in stone, with its immutable 12 activities of daily living etched in tablets afoot patients' beds.

By contrast with some theoretically orientated centres of excellence in the USA, there is little evidence that models have changed practice in the British context. Comparing two wards using different nursing models, Griffiths (1998) found no difference in how nursing care was provided. This finding would not surprise many nurses, but it must be acknowledged that a model can only be as good as the theoretical inclination of the discipline. In a qualitative study of postregistration training in nursing models (Wimpenny 2002), nurses expressed dissatisfaction with the burden imposed by models, one participant commenting: 'When I see models, I see documentation'. This is a fault in application rather than in design. Applying theory demands thought as well as action: nursing needs 'knowledgeable doers' to integrate theory and practice (McCaugherty 1992). Without being naively optimistic, it may be anticipated that the capacity of nurses to comprehend and use theory will be enhanced as a graduate profession and advanced practice develops.

Incompatibility with evidence-based practice

With a plethora of conceptual frameworks for nursing, Barnum (1998) appealed for systematic evaluation, and the need for rigorous validation is pronounced by the current mantra of evidence-based practice. Much nursing theory may be criticized as untested philosophical musings that would fail the Popperian test of falsifiability. However, we must be wary of the notion that practices with the best evidence are the best practices. For example, patients often feel distressed on being admitted to the strange environment of the hospital. To engage in the anxious patient's world, the nurse is guided not by positivist research findings but by an intuitive humanistic ethos tuned by professional training and experience. The most valued activities of nurses are those relating to compassion and empathy (Attree 2001), but these are the elements least supported by hard scientific data. Indeed, the prioritization of evidence has troubled some scholars, particularly in mental health, where bold empiricism is least appropriate to understanding patients' problems. Holmes *et al.* (2006) argue that 'the evidence-based movement in the health sciences is outrageously exclusionary and dangerously normative'.

Nonetheless, nurses should not stand on the sidelines muttering a postmodern critique of objective science, as this would perpetuate their perceived deficits in research literacy and the power imbalances in health care. All healthcare practitioners apply a mixture of personal and professional

knowledge, not all of which is supported by causal analysis. To illustrate, in a medical outpatient session, scientifically validated concepts are applied in diagnosis and treatment decisions, but patient and physician contribute to an interpersonal rapport; accordingly, there is a phenomenological whole greater than the sum of technical parts. A more persuasive argument for nursing is that its core activities are devalued by an episteme that gives primacy to physical science methodology, and to privileged professions. Regarding scientific evidence as the sole basis of knowledge is intellectually sterile, and of dubious validity. The real value of nursing can only be represented by a broad theoretical framework that includes both tested procedures and the humane caring role, and which is operationalized not primarily for research, but for utility. As Kim (2000) emphasizes, there is a distinction between theory in nursing, and little theory of nursing. Unsupported by overarching theory, nursing is more susceptible to bureaucratically imposed outcomes, critical pathways and quality standards (Chambers 1998), amidst a targets regime in public services that serves administrative rather than clinical objectives, while creating perverse incentives (Seddon 2008).

Limits to professional demarcation and autonomy

An impediment to the utilization of models is the context of *de facto* medical leadership and managerial control. As Clarke (1999, p. 16) observes: 'Unlike their medical counterparts, nurses are seemingly unwilling to rely on professional rationales for their actions, opting instead for occupational/managerial justifications'. Yet most nursing occurs as a one-to-one interaction, and there is no reason why this therapeutic relationship should not be underpinned by theory. In the past, nursing was almost entirely hospital based, with clear demarcation between medical and nursing tasks. In the multidisciplinary, community-orientated health care of today, nursing must be able to define its role, rather than leaving other disciplines, managers and policy makers to do this by proxy. A firmer theoretical foundation would protect nursing from managerialism and cost-saving replacement by workers without professional training.

Multidisciplinary teamwork is generally found stimulating and rewarding by nurses, although blurring of roles may lead to professional insecurity. According to Lewy (2008), the interprofessional approach is a positive development that 'should not be misinterpreted and used as a management tool for undermining professions because this effectively destroys the essence of what the agenda has been developed to achieve'. Nursing-specific theory and research may be frowned upon in a multidisciplinary ethos, but there is a problem with a generic concept of evidence: a standardized

procedure such as cognitive behaviour therapy is well supported by research, but does it matter whether this is provided by a clinical psychologist or a nurse? It would not be unreasonable to surmise that each of these disciplines would bring something different to the therapeutic table, and this requires clarification at a theoretical level. The multidisciplinary context therefore is an argument for nursing theory.

Irrelevance to modern health care

Gournay (2001) rejected nursing models as anachronisms in the evidence-based schema of modern multidisciplinary services, while Clarke (2006, p. 72) claims that theoretical frameworks did little more than 'cosmetically enhance the credibility of nursing'.

Perhaps we have passed a necessary stage in the evolution of nursing from subservient vocation to professional accountability. McKenna and Slevin (2008) argue that models written three or four decades ago are now outmoded, but this is contestable. Theory of nursing should be regarded as a continual developmental process, but it should also be emphasized that while practice and wider society have transformed, human needs are basically the same.

The relationship between theory and evidence in nursing can be analogized to the timeless debate between science and ethics. The former entails what we can do; the latter what we should do. While morality in modern society does not necessarily have the permanence given by monotheist religions, there are human values that transcend time and technology. The issue of assisted dying is an example of conflict between the enduring concept of the sanctity of life and the possibilities of a medically ameliorated passage for the terminally ill patient. Such controversy raises unavoidable questions about the role of nursing. A balance must be found between instrumental flexibility to the changing expectations of individuals and society, and a durable ethical stance; ideally, these will evolve in tandem, but there will be contentious issues where nurses are expected to act against their professional inclinations. A code of conduct protects nurses to some extent, but a coherent theory of nursing would provide a rationale for practice in difficult circumstances.

Implications for nursing

From basic tasks to skilled therapeutic interventions, nursing is a pragmatic discipline, whose role and responsibilities are determined by a range of factors including the code of conduct, local and national policies and procedures, research evidence, professional and social norms, and cultural trends. It is also heuristic, the nurse's problem-solving approach coloured by personal values and experience. Edwards and

Liaschenko (2003) describe a commonly expressed a theoretical stance whereby nursing is considered as practical rather than propositional knowledge; hence there cannot be a theory of nursing. Erroneously, nurses may separate the intellectual domain of theory from the clinical setting in the belief that different types of knowledge are used in practice. Carper (1978) identified four equally valid elements of nursing episteme:

- Empirics (verifiable, objective knowledge)
- Aesthetics (tacit, intuitive)
- Ethics (moral)
- Personal knowing (unique perspective based on character and life experience)

At the nurse-patient interface, personal 'knowing' is often more useful than impersonal knowledge. However, as scientific thinking is inculcated in trainees and practitioners, nurses are appreciating the advantages (if not supremacy) of the generalizable over the anecdotal. Kim (2000, p. 2) argues that 'the essential features of nursing knowledge required for practice must embrace the science of control and therapy as well as the science of understanding and care'. Note the term 'science' for what others might consider the 'art' of nursing. This is the crux of the modelling issue: if therapeutic use of self is not conducive to scientific testing, nursing can never achieve objectivity. The challenge is to build theory in a way that maximizes evidence while minimizing reductionism. Research has repeatedly shown correlation between good nursing and positive patient outcomes, but without establishing a conceptual and empirical link. Recent theoretical offerings have emphasized the caring relationship as fundamental to nursing, such as Relationship-Based Care (Koloroutis 2004) and Joanne Duffy's Quality-Caring Model (2003). The latter model, however, claims that relationships are tangible phenomena and thus measurable, but this is a dubious proposition: nursing cannot be objectified by conjecture.

Johnson (1996) asserts that nursing should be pursued as a practical rather than basic or applied science. In other words, it is a means to an end, helping patients to adapt positively to illness, to resume independence and to achieve personal growth. Perhaps pragmatism provides a reasonable and realistic philosophical basis for building the theory of nursing. According to Benner and Wrubel (1989), p.5), 'a theory is needed that describes, interprets, and explains not an imagined ideal of nursing, but actual expert nursing as it is practised day to day'. However, while practice theory, as defined by Ada Jacox (1974), tells the nurse what actions are necessary to achieve a particular goal, a prescriptive approach cannot embody the whole of nursing practice, and as experience with nursing models has shown, it may exacerbate impersonal, ritualized care.

What is already known about this topic

- Models and theories were intended to provide a framework for nursing knowledge and practice.
- Models of nursing have had limited success in bridging the gap between theory and practice.

What this paper adds

- Arguments against nursing theory are challenged.
- Evidence-based practice and multidisciplinary health care do not preclude the development of distinct nursing knowledge.

Implications for practice and/or policy

- Theory of nursing should be reinstated in teaching, practice and research.
- Alongside the pursuit and application of empirical evidence, nursing should embrace theory-based practice.

In a report on the future of nursing commissioned by the Chief Nursing Officer in England, Maben and Griffiths (2008) present a trinity of nurse roles, each entailing a relationship to others:

- Practitioner
- Partner
- Leader

This shows the relative breadth of nursing to other professions, but can this be encompassed in an overarching theory of nursing? Theoretical development may help practitioners to articulate their purpose in an increasingly complex healthcare environment, with roles and responsibilities in constant flux. It is also important for the advancement of the discipline, as its function extends into care episode management, prescribing and specialist skills previously performed by physicians. Credibility and confidence in nursing depends on a change of perception of the role in society, which continues to harbour an angelic image of the nurse as a caring accessory to heroic medicine.

Generation of nursing theory should proceed as a creative, collaborative enterprise, taking account of the diverse settings in which nursing operates. Where possible theory should be of global relevance, covering generic and specialist fields, thus maintaining the unity of nursing. This project need not start afresh, but build on the work of earlier theorists. As urged by Fawcett (2005), scholars should pursue epistemological progression from conceptual model (which are foundational

but not testable), to empirical 'middle-range' theories with operationalized variables and relationships (as espoused by sociologist Robert K Merton). However, we must also embrace the unquantifiable elements of nursing. Eriksson (2002) highlights the ethical essence of caring science, and the need for a 'different key' in constructing a humanistic knowledge for practice. Acknowledging the measurable and abstract properties of nursing, integration should be pursued in three key dualisms:

- Art/science
- Mind/matter
- Teaching/practice

According to Fawcett (1992), 'nursing knowledge, as formalized in a conceptual model, is the starting point in the reciprocal relationship with nursing practice'. Knowledge therefore has primacy when the nurse first enters the ward. A coherent theoretical framework would combine the tremendous diversity of theoretical, experiential and intuitive knowledge into a single schema, guiding nurses in the procedures, interpersonal engagement and values of professional practice.

Conclusion

In recent years, broad theories and conceptual models have been overshadowed by empirical evidence in the episteme of nursing. Attempts to infuse a theoretical outlook in the humanistic enterprise of nursing have had limited success, but the structural and philosophical challenges are not insurmountable. Without being prescriptive, this paper argues for the promotion of theory in preregistration curricula, and for its rightful place in the cycle of nursing knowledge, thus helping practitioners to assert, apply and evaluate their unique role in health care. Current schemes such as the Magnet Recognition Program have encouraged fresh thinking on theoretical foundations for nursing. While no panacea, theory potentially enhances the practice and development of the profession as it responds to the challenges of a continually evolving clinical environment.

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