Nursing models and contemporary nursing
1: their development, uses and limitations

Despite having fallen out of favour, nursing models may incorporate fundamental concepts, values and beliefs about contemporary nursing. It is time to revisit them.

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This two part series explores the value of nursing models and considers whether the fundamental concepts, beliefs and values about nursing in these models are relevant to current policy.

This first article provides: an overview of nursing models; how and why they were developed; and some criticisms. The second article will examine the models in the context of contemporary nursing practice.

INTRODUCTION
Nursing models such as the "activities of living model" (Roper et al, 1990) and the "self-care model" (Orem, 1991) were in widespread use in British nursing in the 1980s and 1990s. They were intended to be used extensively in practice, and to guide the education of nurses.

Many books and articles were written to explain the models and their use. However, they were heavily criticised and, in the past 10 years, seem to have fallen out of favour.

In simple terms, a model can be thought of as a way of representing reality. For example, model cars or aeroplanes allow people to become familiar with an object, understand it and take it apart to see how it works.

Models can also represent abstract and complex situations such as the economy, health beliefs, or grief and bereavement.

Initially, formal models of nursing were considered as ways of representing what nursing is, what it aims to achieve and its components that could then be taken apart, analysed and understood. The components of nursing – however it may be defined – are complex and, as a result, several models were developed. Each offered a different way of thinking about nursing and each presented a different way of guiding nursing practice.

So, a nursing model could be defined as "a picture or representation of what nursing actually is" (Pearson et al, 1996).

DEVELOPMENT OF NURSING MODELS
Nursing models originated in the US in the 1960s, where social, technological, and cultural events were occurring.

The 1960s was a time of staggering technological development; the most prime example being the Apollo space programme. This was a very visible example of the power of science. Some of this expertise spilled over into healthcare, with medical technology.

Alongside these advances came the civil rights movement, which included women's rights. Its consequences included the drive to ensure that more women – and therefore nurses – attended university as well as an awareness of nursing and a desire to develop it as a profession distinct from medicine.

The idea of what defines a "profession" is heavily influenced by Freidson (1988), who believed that one of the hallmarks was the possession of a unique body of knowledge. The early nurse theorists felt it was necessary for nurses to be able to show that they had a body of knowledge specific to nursing, and models were one way of achieving this.

Historically, the theory and practice of nursing has been heavily influenced and dictated by the goals of medicine (Pearson et al, 1996), a position perpetuated through the apprenticeship approach to nurse education. Growing concerns among nurses about the suitability of the medical model added impetus to the development of models for nursing (Pearson et al, 1996).

It was anticipated that models would capture, represent and articulate the concerns and purpose of nursing and develop that all important knowledge base characteristic of professional status (Hodgson, 1992).

There were several difficulties in developing the models, not least of which was a lack of a definition of nursing. This led to Henderson’s definition (Henderson, 1966) being frequently cited, and it formed the cornerstone of debates. There was also a return to the ideas of Florence Nightingale.

In the endeavour to identify and build a body of knowledge unique to nursing, early nurse theorists and model builders were highly influenced by science. They used "scientific" techniques and tried to develop theories that could be "tested" by research.

There was also an interest in systematically describing and analysing concepts considered to be important in nursing practice, which can be seen in the work on the concept of care by Leininger (1988) and Watson (1988).

The arrival of nursing models and the nursing process in the UK can be seen from around the mid 1970s, with the publication of influential texts (Aggleton and Chalmers, 1986; MacFarlane and Castledine, 1982).

The introduction in the 1970s of the idea of the nursing process as a four stage problem solving method to enhance the delivery of care to an individual was an important vehicle in the application of nursing models to clinical practice (Aggleton and Chalmers, 1986). The values, beliefs and theories for care within a model could be used to guide the assessment, planning, implementation and evaluation of care.

The nursing process, like nursing models,
was not without its critics. Increasingly, it was questioned whether the linear problem solving approach to care was a valid reflection of clinical decision making, particularly for experienced nurses (Walsh, 1998).

Care pathways in the UK were a significant move away from the nursing process and a potential threat to individualised care. However, the concept of a planned, standardised, multidisciplinary approach to care for groups of patients with the same problem proved popular (Walsh, 1998) and continues to support the current emphasis on quality (Currie and Harvey, 2000).

**COMPONENTS OF NURSING MODELS**

At a basic level, there are three main components of a nursing model:

- A set of beliefs and values;
- A statement of the goal the nurse is trying to achieve;
- The knowledge and skills the nurse needs to practise (Pearson et al, 1996).

An important step in the development of ideas about nursing was identifying its core concepts, then the beliefs and values around those. After extensive debate, some favour was shown to the idea that nursing has four concepts: person; health; environment; and nursing (Box 1).

Models may have these four concepts as their cornerstones but each describes them little differently. For example, the sets of beliefs and values might be different, so the goal of nursing and the knowledge and skills required might vary (Table 1).

The early theorists drew substantially on other disciplines to develop ideas. For example, Neuman (1995) drew extensively on systems theories in thinking about people as a system that strives for stability. Illness is therefore a stressor that can destabilise an individual, and people then need help from nurses to regain stability.

Peplau (1988) drew on psychological theories to conceptualise nurses as an interpersonal process to help patients with mental health problems. In doing so, she contributed to the recognition of the therapeutic potential of nursing.

Arguably, the most influential and most commonly adopted model in the UK was that developed by Roper at al (1990). This describes a person as being capable of performing activities of living along an independence/dependence continuum throughout their life. The role of the nurse is to assist the individual if necessary to achieve as much independence as possible in these activities. Individuality is an important concept in carrying out the activities of living and this is set in the context of biological, psychological, sociocultural, environmental and politicoeconomic considerations. There was no attempt to prescribe one model to fit all of nursing. Each offered a different picture of nursing. Nurses could select – and modify – a model to serve their needs and those of their patients.

**BENEFITS OF NURSING MODELS**

The introduction and use of nursing models was thought to bring substantial benefits to nursing, nurses and patients. In terms of nursing, it was a serious and committed attempt to develop a knowledge base that would make it unique from other disciplines, in particular medicine.

The hope was that, in devising models of and for nursing, theories of and for nursing could be generated, tested and added to the profession’s knowledge base. Part of this knowledge base would be a set of clear ideas about what nursing is, its values and its contribution to healthcare (Draper, 1990).

While a grand theory of nursing might not be possible, it was hoped that there would be a consensus of what nursing was and that models would lead to the development of tools to help nurses in practice.

Another benefit was that models could offer a set of frameworks to guide practice and education. When teamed with the nursing process, a model could give shape and a structure to assessment, enabling a focus on the patient and allowing clear identification of the nursing problems and hence the nursing care required. Such a framework would guide the planning, implementation and evaluation phases of the process.

For example, using Orem’s model, nurses could assess patients for individual self care deficits and plan interventions to help them to overcome these deficits as much as possible. Here, the process of nursing would be focused on the concerns of nursing, not on those of other disciplines such as medicine.

Such was the importance of nursing models in the 1980s and 1990s that clinical areas had to be seen to be using a nursing model and some educational institutions structured their whole pre-registration curriculum around one. This was partly because models gave some guidance on the knowledge and skills required to deliver care.

For example, the use of Peplau’s model in a mental health programme would emphasise that nursing is potentially a therapeutic, interpersonal process; the curriculum would focus on the knowledge and skills needed to provide that kind of nursing care. A general nurse training programme based on Neuman’s system model would emphasise the need to assess the patient for stressors affecting them and provide interventions to offset their effects.

The use of a model could also potentially

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**TABLE 1. BELIEFS AND VALUES WITHIN DIFFERENT MODELS OF NURSING**

<table>
<thead>
<tr>
<th>Model</th>
<th>Views on “person”: beliefs and values</th>
<th>Goal of nursing</th>
<th>Knowledge and skills needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roper at al (1990)</td>
<td>Individuals engage in 12 activities of living over their lifespan which can be affected by a variety of factors</td>
<td>Help people to prevent, alleviate, solve or cope with problems (actual or potential) related to activities of living</td>
<td>The physical, psychological, sociocultural, environmental, political (sexual and spiritual) underpinnings of the 12 activities of living</td>
</tr>
<tr>
<td>Orem (1991)</td>
<td>Individuals have the capacity to self care</td>
<td>To help overcome an individual’s deficits in self care caused by illness health</td>
<td>Deliberate actions to promote self care, through active doing for another, guiding, supporting, adjusting the environment and teaching</td>
</tr>
<tr>
<td>Neuman (1995)</td>
<td>The person is an “open system” in constant interaction with the environment (Pearson et al, 1996)</td>
<td>Helping to stabilise the system which has become unstable due to internal and external stressors</td>
<td>Understanding of how stressors can have a physical, psychological and sociocultural impact and of the importance of health promotion</td>
</tr>
</tbody>
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**BOX 1. CENTRAL CONCEPTS OF ALL NURSING MODELS (FAWCETT, 1995)**

- Person – the recipient of nursing actions
- Environment – the recipient’s surroundings
- Health – the wellness or illness state of the recipient
- Nursing – actions taken by nurses on behalf of or in conjunction with a recipient
lead to a common language to allow nurses to discuss nursing practice. Patients would receive systematic nursing care, focused on their needs, and in which the unique nursing contribution was articulated and demarcated.

**CRITICISMS OF NURSING MODELS**

Initially, nursing models were endorsed in the UK (Aggleton and Chalmers, 1986; UKCC, 1986). However, they also received significant criticism (Draper, 1990; Miller, 1984).

These criticisms can be categorised into intrinsic and extrinsic. Intrinsic criticisms relate to the model itself, which may include the language used, or the beliefs and values. Extrinsic criticisms are related to factors that are external to the model, such as approach to implementation, attitudes to change and the motives for developing nursing models.

**Intrinsic factors**

Nursing models received criticism for their frequent use of jargon and complex concepts, which did little to endear them to UK nurses (Kenny, 1993; Hodgson, 1992).

Neuman (1995) uses the terms intra, inter and extra-personal stressors that can affect the system (or the person), which has a central core, lines of resistance and two lines of defence. Orem (1991) includes complex terms such as health deviation, universal and developmental self care requisites, self care deficit, dependent care deficit, and wholly, partly compensatory and supportive educative nursing systems.

Such complex concepts and terminology had to be grasped before the models could be used. Hodgson (1992) concluded that models “leave us puzzling over the ridiculous use of English and ideas so embedded in terminology as to be inaccesible”.

Another related to their origin in the US. Questions were raised about their underpinning philosophy and values, and their applicability and transferability to British nursing (Kenny, 1993; Draper, 1990).

For example, the concept of self care in Orem’s model assumed a willingness and motivation on the part of patients to manage their healthcare needs to an extent, which sat well in the US healthcare system at that time. However, the NHS historically has a less individually centred approach, with the state having greater responsibility for care costs and health. This meant the notion of self care as described by Orem was alien to British nurses and patients in the 1980s and 1990s.

Nursing models represent values and beliefs about nursing held by individual authors. Critical analyses have suggested these to be rather narrow perspectives (Hardy, 1982). The irony here is that one of the main reasons for developing nursing models was to capture and articulate the nature and contribution of nursing as a discipline (Tierney, 1998). Yet Miller (1984) argued that models were idealised, lacked relevance to the reality of nursing and, as such, increased the gap between theory and practice.

Models also received criticism for the lack of research underpinning the relationships between the concepts and the effects on care (Fraser, 1996). As a result, models remained at a descriptive and explanatory level at best and failed to serve a practice based discipline like nursing (Dickoff and James, 1968).

Draper (1990) added that the application of theories from other disciplines by academic nurses to explain nursing was inadequate. He and others argued for inductive theory generation derived from the practice of British nurses and the reality of contemporary British practice (Draper, 1990; Miller, 1985). Following this logic, the end theory would be more useful, valuable, and readily embraced by practitioners.

**Extrinsic factors**

The approach to implementation in the UK received critical attention. Kenny (1993) highlighted the “top down” strategy used to introduce nursing models, which prevented a sense of ownership by nurses and created a significant barrier to success.

The lack of training in the use of models, together with resistance to change, also posed significant barriers to implementation (Kenny, 1993). Reflecting on the nature, approach and attitude towards change and the bureaucratic environment of the NHS, Kenny (1993) also questioned whether the models stood any real chance of success.

Further scepticism of nursing models was derived from the perception that their purpose was primarily to advance the professionalisation of nursing (Hodgson, 1992) rather than improve patient care.

**CONCLUSION**

Models of nursing represent an important stage in the development of nursing theory and of nursing as a discipline.

The criticisms they generated were an important part of the professional debate and advancement of nurses and nursing. It could be argued that some of this criticism arose from a lack of clarity as to the aim and purpose of nursing models and their implementation, rather than the concepts and ideas within them. Nursing models may incorporate fundamental concepts, values and beliefs about nursing that are pertinent to contemporary nurses.

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**REFERENCES**


