

## ORIGINAL RESEARCH

## Autonomy, evidence and intuition: nurses and decision-making

Michael Traynor, Maggie Boland &amp; Niels Buus

Accepted for publication 5 February 2010

Correspondence to M. Traynor:  
e-mail: m.traynor@mdx.ac.uk

Michael Traynor MA PhD RN  
Professor of Nursing Policy  
School of Health and Social Sciences,  
Middlesex University, London, UK

Maggie Boland BSc MA RN  
Senior Lecturer/Adult Nursing  
Middlesex University, London, UK

Niels Buus MN PhD RN  
Postdoctoral Research Fellow  
University of Southern Denmark, Odense,  
Denmark

TRAYNOR M., BOLAND M. & BUUS N. (2010) Autonomy, evidence and intuition: nurses and decision-making. *Journal of Advanced Nursing* 66(7), 1584–1591. doi: 10.1111/j.1365-2648.2010.05317.x

**Abstract**

**Title.** Autonomy, evidence and intuition: nurses and decision-making.

**Aim.** This paper is a report of a study conducted to examine how nurses represent professional clinical decision-making processes, and to determine what light Jamous and Peloille's 'Indeterminacy/Technicality ratio' concept can shed on these representations.

**Background.** Classic definitions of professional work feature autonomy of decision-making and control over the field of work. Sociologists Jamous and Peloille have described professional work as being high in 'indeterminacy' (the use of tacit judgements) relative to technicality (activity able to be codified). The rise of the evidence-based practice movement has been seen as increasing the realm of technical decision-making in healthcare, and it is relevant to analyse nurses' professional discourse and study how they respond to this increase.

**Method.** Three focus groups with qualified nurses attending post-qualifying courses at a London university were held in 2008. Participants were asked to talk about influences on their decision-making. The discussions were tape-recorded, transcribed and subjected to discourse analysis.

**Findings.** Participants described their decision-making as influenced by both indeterminate and technical features. They acknowledged useful influences from both domains, but pointed to their personal 'experience' as the final arbiter of decision-making. Their accounts of decision-making created a sense of professional autonomy while at the same time protecting it against external critique.

**Conclusion.** Pre- and post-registration nurse education could encourage robust discussion of the definition and roles of 'irrational' aspects of decision-making and how these might be understood as components of credible professional practice.

**Keywords:** autonomy, decision-making, discourse analysis, evidence, focus groups, intuition, nurses

**Introduction**

The rise of evidence-based medicine (EBM) has been resisted by some healthcare professionals on the grounds that it does

not account for the highly contextual, subtle and sometimes tacit judgement that professionals draw on in making clinical decisions (Rolfe 1999, Pope 2003, Walker 2003). As part of a study of reforms of the French University hospital system,

sociologists Jamous and Peloille proposed that occupational work could be understood as a combination of technically definable activity and the formation of professional judgement (Jamous & Peloille 1970). They termed these two dimensions 'technicality' and 'indeterminacy'. They proposed that the work of professionals was distinctive because of its high levels of indeterminacy relative to technicality (i.e. a high 'I/T ratio'). They went on to argue that professional groups such as doctors face a dilemma: if they account for their work in terms of its technical complexity or its explicit following of openly available rules, they risk the possibility of intervention and control by other groups because of the accessibility of key knowledge about their work. To avoid this potential outside control, such groups may emphasize the indeterminacy of their work. Indeterminacy (or uncertainty) would call for professional judgement or the use of tacit or private knowledge; this would allow professions to emphasize the specific social qualities of its members which make them particularly able to form such judgements. The risk of too heavy an emphasis on indeterminacy, however, is that other groups can claim equal or superior skill, and the champions of indeterminacy could lose control over their field and the ability to make predictions within it. Although subsequently criticized as ambiguous regarding whether the focus of Jamous and Peloille was on professional rhetoric or on the measurement of actual work (Atkinson *et al.* 1977), their framework can nonetheless offer a way of theorizing how nurses describe their clinical decision-making activities. We might expect them, as professionals, to represent their work in a way that foregrounds indeterminate aspects of their decision-making, such as tacit judgement of various kinds.

## Background

### Evidence and expertise

Classic definitions of professional work feature autonomy of decision-making and control over the field of work (Larson 1977, Freidson 1994). In the healthcare systems of many developed economies, governments and their managerial agents have attempted to control the spending and activity of medicine in state- and insurance-funded systems, and this has sometimes been seen as an assault on medical professionalism (Harrison & Pollitt 1994). In this context, the emergence of EBM has been viewed by some in the healthcare professions as a threat to autonomy because of its potential to codify best practice and render decisions open to scrutiny by those outside the profession. Despite such controversies, both medicine (Smith 1991) and nursing have formally endorsed the principles of evidence-based practice

(Kitson 1997). Examinations of clinical decision-making and the promotion of the application of research in practice are both well-developed in nursing and are often linked (Closs & Cheater 1989, Funk *et al.* 1995, Thompson 1997). Some promotions of research-mindedness in nursing have described nursing as prone to the irrational influence of 'traditions, myths and rituals' (Walsh & Ford 1989). This can be seen in the overall context of a long-standing professionalizing drive to distance nursing from an association with the supposed irrationality of the traditional role of women as healers and identify the profession with science-based activity (Bixler & Bixler 1945, Watson 1981, Marriner-Tomey 1983, Dinsdale 2000). It must be remembered, however, that other voices in nursing have argued for nursing to be far more positive about the role of so-called 'women's ways of knowing' (Chinn & Wheeler 1985, Hagell 1989), tacit judgements (Benner 1984) and intuition (Baines 1998, Effken 2001, McCutcheon & Pincombe 2001). In summary, the healthcare professions are at a point where the traditionally valued expert judgement, described by Jamous and Peloille as indeterminacy, faces a strong challenge from governments demanding performance management, standardization and accountability (Timmermans & Berg 2003) and from the evidence-based movement for more rationally defensible decision-making. In the light of these forces and of differing views within the nursing profession, the present research was designed to investigate how nurses themselves describe their clinical decision-making.

## The study

### Aim

The aim of the study was to examine professional nursing discourse by studying how groups of nurses represent professional clinical decision-making processes, and to determine what light Jamous and Peloille's 'I/T ratio' concept can shed on these representations.

### Design

A qualitative study was conducted, using focus groups for data collection and elements of discourse analysis and ethnomethodology to inform the analysis.

### Participants

Focus groups with Registered Nurses were held in 2008 [An earlier round of focus groups exploring the same issues was held by one of the authors in 2003 and is described

elsewhere (Traynor *et al.* 2003)]. We aimed at recruiting nurses who were already qualified and practising, rather than nursing students, because we intended to ask them about influences on their practice. Because of the complexity of obtaining ethics approval for the study within a UK NHS setting, we recruited our sample from a higher education institution; however, this meant that our participants were likely to be more able to articulate mainstream professional discourse (which was the interest of our research) than many nurses, reflected in their engagement with post-qualifying education.

### Data collection

With the help of course leaders in a London university, we set up three focus groups involving volunteers from three post-qualification courses for specialist nurses. The groups ran in lunch breaks and were audio recorded and later fully transcribed. The groups were moderated by the first and second authors, who also served the food. Focus groups were chosen because we wanted to understand how groups of nurses produced and negotiated representations of clinical practice in discussion. The groups had eight, eight and ten participants. Because of their specialist background, these can be considered three relatively homogeneous groups. Both the size and composition of the groups are considered optimum for the functioning of a focus group (Barbour & Kitzinger 1999).

The following topic guide was used in all of the groups:

What things influence you when making a clinical decision? Can you think of a specific example?

(Possible prompt) How do you decide what to do when research or research and experience are contradictory?

(Possible prompt) What about research/instinct/intuition [whatever has not been mentioned]

N.B. Prompts only to be used later in the discussion

### Ethical considerations

The study was approved by the university ethics committee and the groups were run in private with rules of confidentiality agreed.

### Analytical background

For the purposes of this paper, the analysis focuses on how the groups represented instances of decision-making in the light of the concept of the indeterminacy/technicality ratio discussed above and existing professional nursing discourse. By professional nursing discourse we mean the effect of

policy and professional documents and other literature which presents and promotes classic professional attributes (Freidson 1994, Davies 1995, Light 1995) such as status, a body of knowledge that is unique from medicine and autonomy in action. We suggest that the presence of such a discourse makes a particular way of thinking and talking about being a professional so available that it is difficult for individuals to conceive of and represent their identity apart from these discourses (Alvesson & Karreman 2000, Fairclough 2003). We wanted to investigate how the groups either worked together or did not work together in a way that can be seen as enacting membership of, or participation in, the professional identity that such discourse makes available (Drew & Heritage 1992). From this analytic orientation there is little interest in how far a group's talk reflects 'what actually occurs' in practice i.e. how decision-making is done or in what the talk might tell us about the experiences or life-worlds of individuals (Traynor 2006). We understand the talk instead as an attempt at a presentation or performance of a credible and unified professional identity.

Our understanding of identity is influenced by both post-structuralist and ethnomethodological ideas. Just as the individual human subject is 'born into language' and can be seen as having no possibility for identity apart from discursive structures ['It's a girl' pronounces the midwife and so, according to Butler, the child is initiated or interpellated (hailed) as 'girl' (Butler 1997)], so being 'a professional nurse' can only be achieved (according to these theories) in the context of and in terms of organized discourses of profession and professional nurse. This is because such a discourse is so pervasive, available and persuasive. From an ethnomethodological perspective we can conceive of a professional (or any) identity as an on-going accomplishment that is achieved by accounting practices (the accounts that people give of their actions) in a social context (Garfinkel 1967). Participants organize their talk to reflect and reinforce what is considered a coherent and credible way to act in a particular context [For a discussion of the 'overlap' as well as the differences between these two theoretical positions see Fenstermaker and West (Fenstermaker & West 2002)]. Previous research has worked with focus group data in this way (Wetherell *et al.* 2001). Using this understanding of talk, this paper focuses on how each of the nurses collaboratively articulated features of indeterminate and technical decision-making procedures in the group discussions. With the notion of the 'indeterminacy/technicality' ratio in mind, talk of intuition is understood as an example of a claim for indeterminacy while guidelines, protocols and 'standard operating procedures' stand as the operation of the realm of technicality.

## Data analysis

In the initial analysis, the dataset was coded by the first author inductively. Later, the entire dataset was re-coded and interpreted in collaboration by the first and third author. Our central analytic question which we asked of each passage was 'how is this spoken interaction being used to present or challenge a particular account of professionalism?' We made notes on each passage addressing this question. We also considered how often particular types of interaction appeared across the dataset and we were open to consider 'outlying' talk that did not appear to fit within Jamous and Peloille's framework yet appeared important for an understanding of our research question. Working collaboratively helped to expand our singular perspectives.

## Findings

Twenty-six Registered Nurses participated in the three focus groups: eight in the Cancer Care and Safeguarding Children groups and ten in the Reproductive and Sexual Health group. On average, they had been qualified for 10.4 years ( $SD = 10.8$ ). Participants from Reproductive and Sexual Health group had been qualified for a shorter period of time compared to the other two groups (7.5 years compared to 12.5 and 12.1 years), and there was a smaller range of length of experience within this group.

When we asked the nurses to reflect on their professional decision-making by asking about influences, they responded by describing decision-making in different clinical and administrative contexts. Across the whole dataset the accounts depicted their decision-making neither as fully indeterminate

nor totally technical. The interactional dynamics in the groups most often led to modifications of accounts of unrestricted indeterminacy or technicality by the speakers we quote below. In this way, the groups collectively withdrew from extreme accounts while maintaining a fundamental indeterminacy. This served to make a discourse of professional autonomy tenable against the possible threat of the constraining and disempowering effect of unrestricted technicality. In the following two sub-sections we present *indeterminacy* and *technicality* in the nurses' descriptions of decision-making and show how these dimensions of decision-making were used to promote images of professional autonomy, but also how situational demands, such as heavy workload, were described as restricting autonomy in decision-making.

### Negotiating indeterminacy

In general, descriptions of indeterminacy in the nurses' accounts of decision-making were related to terms such as 'intuition' and 'instinct'. However, group members explained and negotiated the meaning of these terms so that they were not closely associated with an irrationality that might be dangerous to 'authorized' professional discourse about decision-making. Words that potentially could indicate extreme indeterminacy were downgraded with rational connotations, for instance, 'rapid information processing' or 'knowledge'. In the following extract, instinct and intuition are described as the initial part of rational and systematic decision-making and as informed by clinical expertise.

In the extract, Nurse 4 downgrades the indeterminacy of instinct by minimizing its influence on clinical decision-making (lines 1–2 and 5–7) and describes it as something

### Extract 1. Reproductive and sexual health:

- 1 N4: I think instinct is probably a very minor factor when making clinical decisions. I think
- 2 occasionally you can get a feeling from a patient because of their disposition or expression or
- 3 something like that, and maybe probe a little bit further when you are interviewing them.
- 4 That might give you new information that might influence the way that you treat them but
- 5 generally I don't personally use instinct very often in making clinical decisions.
- 6 N1: I remember though, when I did my nurse training we talked a lot about it. No, but we talked
- 7 about it and were aware of it. It's in some people more than others.
- 8 N3: I think it's quite dangerous to get into that as a basis of a clinical decision. I think that's quite
- 9 dangerous because you could quite easily make the wrong...
- 10 N1: If you meet a girl and you have a feeling something's wrong with her...
- 11 N3: Then I wouldn't go on to make a clinical decision based on that...
- 12 N1: No, but you are starting to ask questions...
- 13 N3: Of course I wouldn't make a clinical decision based on intuition. I would use it as a channel
- 14 to...
- 15 N4: I think instinct can guide us to spend a bit longer with a patient and just ask a few more open
- 16 questions. Then something might turn up.
- 17 N3: Your instinct is sharpened by your experience I think. It's not just sort of a floaty feeling. I
- 18 think sometimes you're actually putting together clinical expertise quickly

subject to rational choice and available as an initial part of more systematic approaches (lines 2–5). Nurse 1 underscores the indeterminacy of instinct by describing it as a personal quality (lines 8–10). This statement prompts Nurse 3 to warn about an over-reliance on instinct because an instinctive idea could easily be wrong (lines 11–13 and 15). Nurse 3 repeats this in her argument that one can have a feeling about something, but adds that this feeling can be used to seek more information (lines 17–18). In the end, Nurse 3 gives in by accepting that intuition is useful before the systematic approaches (21–23). This position resembles Nurse 4’s initial description, and Nurse 4 repeats it (lines 19–20). Finally, Nurse 3 underscores that instinct does not reflect total indeterminacy, but is a quality of experience (lines 21–23).

Across the dataset as a whole, participants described a number of situated instances where they made significant decisions based on indeterminate features of decision-making, such as instinct and intuition. However, they subordinated these features to their experience and/or more formalized assessments. In this way, they elegantly produced an image of professional decision-making where nurses, depending on their experience, were professional autonomous agents who could choose to use the – in professional terms – more problematic indeterminate features of clinical decision-making. It was common to describe intuition through a narrative where nurses position themselves as agents at the centre of events. The nurse-narrator heroically autonomously solves problems, saves lives, or battles other professionals’ bad decisions based on the vague feeling, but firm belief, that something is wrong and something needs to be done about it.

Participants read the clinical situation through an indeterminate decision-making process and responded accordingly. However, situational factors, in particular issues related to workload and bureaucratic institutional practices, could also subvert indeterminate decision-making when they did not have the time or energy to follow their intuitive leads. These situational descriptions depict the nurses without professional agency, weighed down by work.

### Negotiating technicality

Group discussions about the level of technicality in their decision-making centred on terms such as guidelines, manuals, protocols and evidence. Participants produced two separate sets of accounts of these terms. In the first set, they associated them with unrestricted technicality, as instruments they had to adhere to and act in accordance with. These instruments were simultaneously acknowledged as valid and as too theoretical and sometimes of little practical use. The nurses constructed a second set of accounts describing the actual use of protocols etc. Here, their personal agency and experience were emphasized as central in the modus operandi of using manuals. In the following extract, two nurses negotiate the necessity of using guidelines while, at the same time, emphasizing the practical impossibility of using guidelines in an unrestricted technical way.

In this extract, Nurse 4 points to a gap between theoretical use of guidelines and their actual use in everyday clinical work (lines 1–3). Then Nurse 4 continues by assembling a set of good reasons for not using the guidelines: (1) The child’s

#### Extract 2. Safeguarding children:

- 1 N4: We have to abide by the guidelines, but on the ground you may be... In theory we do it  
2 according to the guidelines, but on the ground it might be slightly different. Parents might be  
3 asking you to tepid sponge. NICE guidelines say “Do NOT tepid sponge”. You can’t actually  
4 say to that parent “don’t do it”. You can say, “Guidelines don’t recommend it”. The truth is,  
5 it’s their child. What can you do? I think it works. It makes the parents feel better and  
6 sometimes actually it makes the child feel better. Right downstream there are guidelines for  
7 everything. Every situation’s got guidelines, hasn’t it? Accidental injuries or non-accidental  
8 injuries, you got child protection guidelines and NICE guidelines. Everything you do is  
9 influenced by them to a certain extent, though you don’t always know at the time. If  
10 something happens you might have to refer to the guidelines. For instance, if the child is  
11 going for a scan, you have to abide by certain protocols and procedures because of the child’s  
12 safety, but at the end of the day it’s usually the consultant’s decision is finally say whether or  
13 not that that procedure is safe with that child at that time and with those parameters.  
14 Mod: So the guidelines are there but they’re not, but sometimes other factors override what they  
15 say?  
16 N3: Because you see. It’s a complicated situation. Guidelines are guidelines and in theory they  
17 are enforceable, but in such a convoluted way that many people don’t realise they are. They  
18 are enforceable by the PCT [the employing organisation] but the PCT aren’t the people  
19 actually on the ground doing it. And you obviously can’t stop every time you are doing  
20 something to say, “What do the guidelines say?”

### What is already known about this topic

- Conventional understandings of professionalism emphasize autonomy of decision-making.
- Evidence-based practice, although controversial in medicine and nursing, has been endorsed by both.
- The emphasis in evidence-based practice is on technical procedures in decision-making.

### What this paper adds

- The nurses described technical instruments for decision-making as impossible to adhere to fully, and introduced personal experience as a rational way of utilizing them in everyday practice.
- The nurses found talk of indeterminate decision-making processes awkward and attempted to normalize such talk by aligning it with personal experience.
- The nurses distanced themselves from competing calls to identify their professionalism either wholly with intuitive practice or with the possibly disempowering following of procedures by having recourse to experience, which allowed them to maintain a sense of professional autonomy.

### Implications for practice and/or policy

- Pre- and post-registration nurse education could encourage robust discussion of the definition and roles of 'irrational' aspects of decision-making and how these might be understood as components of credible professional practice.

parents may wish to act differently and it would be wrong to go against their wishes (lines 3–7), (2) There are guidelines for everything, which makes it impossible to be explicitly aware of them all in advance, but in a critical situation they can be used to refer to (lines 7–14), (3) Everybody (even the consultants) modifies guidelines by taking situational factors into account (lines 14–17). After a probe from the moderator about overriding guidelines, Nurse 3 continues the argument about the gap between clinical staff and management by making strict adherence to guidelines appear bureaucratic and absurd (lines 20–25).

As with the indeterminate decision-making processes, participants constructed a balanced, but professionally defensible position. On one hand, they acknowledged and appreciated formalized instruments for being helpful and in some cases necessary in clinical decision-making, e.g. as part of covering oneself legally if something goes wrong, or as a resource in

arguments with other professionals. On the other hand, the instruments were also something obviously (in practical and ethical terms) impossible to adhere to fully in practice, and therefore they needed constant modification according to the clinical situation. As in the descriptions of indeterminate decision-making processes, the nurses pointed to their experience as the key to a professionally defensible way of using and modifying formal instruments for clinical decision-making.

The articulation of experience as the key element of both indeterminate and technical decision-making positions the individual nurse's own agency at the centre of professional decision-making. The constructed need for nurses' experience in reining in indeterminacy and modifying technicality was a central characteristic of descriptions of decision-making processes. However, participants continually described situational factors that had the potential to subvert both types of decision-making and their professional autonomy.

## Discussion

### Study limitations

We make no claims that our findings give insight into the whole nursing workforce. Nurses actively involved with professional development programmes are likely to be different from those who are not, and are possibly more familiar with professional discourses. There was only one group from each speciality and therefore it is hazardous to talk about differences between them. In addition, richer data might have been obtained from longer sessions. The quality of the sound recording was occasionally poor, making transcription uncertain in places. Our conclusions, therefore, are tentative.

### Discussion of findings

According to Jamous and Peloille, groups with low status or on the fringes of powerful professional groups are more likely to promote technically based reform, whereas elites are likely to resist with assertions of indeterminacy. Previous research has provided some support for this. Walby and Greenwell (1994) examined the interaction and professional differences between doctors and nurses during the early 1990s in a UK health service that had recently undergone reforms. They claimed that, at ground level, 'the nursing notion [of professional activity] was one of technicality, of pinning down exactly what was to be done and the training and staff needed to do it to agreed standards... nurses often saw professionalism as being a rule-governed process' (p. 61). Nearly a decade later Timmermans and Berg (2003) argued that clinical practice guidelines are often used to claim a

special status and to solicit jurisdiction over a technical domain. They discussed the example of the Nursing Interventions Classification (NIC) system developed at the University of Iowa during the 1990s, which catalogues and describes in meticulous detail some 486 nursing interventions. Interviews with those responsible for developing the system pointed to anxiety over a possible lack of visibility and clarity to hospital administrators of nursing work.

In our study, it seemed that nurses managed the presentation of a professional identity in a more complex way than these previous studies have suggested. They tempered their identification with both the indeterminate (in this case instinct and intuition) and the technical (here guidelines and policies) by calling on their experience as the final arbiter of a decision. Experience can act as reference point against which to check the possibly misleading suggestions of intuition, and can also release nurses to modify or ignore clinical guidelines. This subtle management of identity allowed participants to avoid the dangers identified by Jamous and Peloille and maintain mastery over their own practice.

The nurses had an unexpectedly situated understanding of everyday decision-making processes. The primary threat to their professional autonomy was not described as related to the extremes of technical or indeterminate decision-making processes, as predicted by Jamous and Peloille, but rather to heavy workloads and other contingencies of daily work. Nurses knew how to draw appropriately on mainstream nursing discourses in their nuanced accounts of professional decision-making; however, they also drew on a more 'experience-near' (Good 1994) understanding of the everyday events and institutional structures that can subvert autonomous decision-making processes. Jamous and Peloille's theory seems most concerned with the former range of decision-making, but the latter seems to describe more pertinent threats to nurses' autonomous decision-making.

## Conclusion

These nurses involved in professional development programmes used a range of rhetorical moves to distance themselves from competing calls to identify their professionalism either with the apparently dangerous irrationalism of intuitive practice or with the strict and possibly disempowering following of procedures. It would be instructive to compare our findings to similar studies involving other healthcare professions, such as medicine, and in other healthcare systems where influences on practice and on nursing professionalism may be different, for example in systems where the status of nursing is more assured than in the UK. This research holds no simple implications for

practice or healthcare policy. It has, however, shown the effect of policy and professional movements on nurses' own understanding of their activities. Our intention in carrying out the research was to add to knowledge about the professions and, specifically, to see how useful the 40-year-old theories of Jamous and Peloille are to a study of contemporary nursing. We concluded that the concepts of indeterminacy and technicality provide a useful framework for understanding contemporary professional practice.

## Funding

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

## Conflict of interest

No conflict of interest has been declared by the authors.

## Author contributions

MT was responsible for the study conception and design. MT and MB performed the data collection. MT, MB and NB performed the data analysis. MT, MB and NB were responsible for the drafting of the manuscript. MT and NB made critical revisions to the paper for important intellectual content. MB provided administrative, technical or material support.

## References

- Alvesson M. & Kärreman D. (2000) Varieties of discourse: on the study of organisations through discourse analysis. *Human Relations* 53(9), 1125–1149.
- Atkinson P., Reid M. & Sheldrake P. (1977) Medical mystique. *Sociology of Work and Occupations* 4(3), 243–280.
- Baines L. (1998) Listening to the evidence: evidence-based practice and intuition can sit well together. *Nursing Standard* 12(23), 20.
- Barbour R. & Kitzinger J. (eds) (1999) *Developing Focus Group Research: Politics, Theory and Practice*. Sage, London.
- Benner P. (1984) *From Novice to Expert: Excellence and Power in Clinical Nursing Practice*. Addison-Wesley, Menlow Park, CA.
- Bixler G.K. & Bixler R.W. (1945) The professional status of nursing. *The American Journal of Nursing* 45(9), 730–735.
- Butler J.P. (1997) *The Psychic Life of Power: Theories in Subjection*. Stanford University Press, Stanford, CA.
- Chinn P. & Wheeler C. (1985) Feminism and Nursing; can nursing afford to remain aloof from the women's movement? *Nursing Outlook* 33(2), 76.
- Closs J. & Cheater F. (1989) Variables related to research utilisation in nursing; an empirical investigation. *Journal of Advanced Nursing* 14, 705–710.
- Davies C. (1995) *Gender and the Professional Predicament in Nursing*. Open University Press, Buckingham.

- Dinsdale P. (2000) Robust research is key to nurses' political influence. *Nursing Standard* 14, 7.
- Drew P. & Heritage J. (eds) (1992) *Talk at Work: Interaction in Institutional Settings*. Cambridge University Press, Cambridge.
- Effken J.A. (2001) Informational basis for expert intuition. *Journal of Advanced Nursing* 34(2), 246–255.
- Fairclough N. (2003) *Analyzing Discourse: Textual Analysis for Social Research*. Routledge, London.
- Fenstermaker S. & West C. (eds) (2002) *Doing Gender, Doing Difference: Inequality, Power and Institutional Change*. Routledge, New York.
- Freidson E. (1994) *Professionalism Reborn*. Polity, Cambridge.
- Funk S., Tornquist E. & Champagne M. (1995) Barriers and facilitators of research. *Nursing Clinics of North America* 30(3), 395–407.
- Garfinkel H. (1967) *Studies in Ethnomethodology*. Prentice Hall, Englewood cliffs.
- Good B.J. (1994) *Medicine, Rationality, and Experience*. Cambridge University Press, Cambridge.
- Hagell E. (1989) Nursing knowledge: women's knowledge. A sociological perspective. *Journal of Advanced Nursing* 14(3), 226–233.
- Harrison S. & Pollitt C. (1994) *Controlling Health Professionals; the Future of Work and Organisation in the NHS*. Open University Press, Buckingham.
- Jamous H. & Peloille B. (1970) Professions or Self-Perpetuating System; changes in the French University-Hospital System. In *Professions and Professionalisation* (Jackson J., ed.), Cambridge University Press, Cambridge, pp. 109–152.
- Kitson A. (1997) Using evidence to demonstrate the value of nursing. *Nursing Standard* 11(28), 34–39.
- Larson M.S. (1977) *The Rise of Professionalism: A Sociological Analysis*. University of California Press, Berkeley.
- Light D. (1995) Countervailing powers. A framework for professions in transition. In *Health Professions and the State in Europe* (Johnson T., Larkin G. & Saks M., eds), Routledge, London, pp. 25–41.
- Marriner-Tomey A. (1983) *The Nursing Process: A Scientific Approach to Nursing Care*. Mosby, St. Louis.
- McCutcheon H. & Pincombe J. (2001) Intuition: an important tool in the practice of nursing. *Journal of Advanced Nursing* 35(3), 342–348.
- Pope C. (2003) Resisting evidence: the study of evidence-based medicine as a contemporary social movement. *Health: An Interdisciplinary Journal for the Social Study of Health, Illness and Medicine* 7(3), 267–282.
- Rolfe G. (1999) Insufficient evidence: the problems of evidence-based nursing. *Nurse Education Today* 19, 433–442.
- Smith R. (1991) Where is wisdom? The poverty of medical evidence. *British Medical Journal* 303, 789–790.
- Thompson M. (1997) Closing the gap between nursing research and practice. *Evidence-based Nursing* 1(1), 7–8.
- Timmermans S. & Berg M. (2003) *The Gold Standard: The Challenge of Evidence-Based Medicine and Standardization in Health Care*. Temple University Press, Philadelphia.
- Traynor M. (2006) Discourse analysis: theoretical and historical overview and review of papers in the Journal of Advanced Nursing 1996–2004. *Journal of Advanced Nursing* 54(1), 62–72.
- Traynor M., Rafferty A.M. & Solano D. (2003) Between the Lines. *Nursing Standard* 18(8), 16–17.
- Walby S. & Greenwell J. (1994) *Medicine and Nursing. Professions in a Changing Health Service*. Sage, London.
- Walker K. (2003) Why evidence-based practice now?: a polemic. *Nursing Inquiry* 10(3), 145–155.
- Walsh M. & Ford P. (1989) *Nursing Rituals, Research and Rational Actions*. Heinemann, Oxford.
- Watson J. (1981) Nursing's Scientific Quest. *Nursing Outlook* 27, 413–416.
- Wetherell M., Taylor S. & Yates S. (eds) (2001) *Discourse as Data: A Guide for Analysis*. Sage in association with Open University Press, London.

The *Journal of Advanced Nursing (JAN)* is an international, peer-reviewed, scientific journal. *JAN* contributes to the advancement of evidence-based nursing, midwifery and health care by disseminating high quality research and scholarship of contemporary relevance and with potential to advance knowledge for practice, education, management or policy. *JAN* publishes research reviews, original research reports and methodological and theoretical papers.

For further information, please visit the journal web-site: <http://www.journalofadvancednursing.com>

#### Reasons to publish your work in *JAN*

**High-impact forum:** the world's most cited nursing journal within Thomson Reuters Journal Citation Report Social Science (Nursing) with an Impact factor of 1.654 (2008) – ranked 5/58.

**Positive publishing experience:** rapid double-blind peer review with detailed feedback.

**Most read journal globally:** accessible in over 6,000 libraries worldwide with over 3 million articles downloaded online per year.

**Fast and easy online submission:** online submission at <http://mc.manuscriptcentral.com/jan> with publication within 9 months from acceptance.

**Early View:** quick online publication for accepted, final and fully citable articles.